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Notes from the President

Nick Wallingford

Summary of the new Apiary Levy:

You must pay a levy to the National Beekeepers' Association if you have more than 10 beehives or if you have more than three apiary sites.

It doesn't matter what you may have used your beehives for, or whether you took any surplus honey or other bee products from them.

"Apiary sites" refers to the sites you had registered with MAF as at 1 June 1996. All of those sites are levy payable, whether you had beehives on them at that date or not.

The levy is paid at $50 for the first apiary and $22 for each subsequent apiary (both figures are exclusive of GST).

Beekeepers who are paying more levy than they did under the Hive Levy Act may want to consider consolidating apiaries, or releasing those infrequently used, in order to reduce levy obligations.

Beekeepers will pay to the NBA using a new system for the 1997 year. These notes will clarify a few issues as to how the levy system was developed and specifics about paying it.

The National Beekeepers' Association was told nearly 10 years ago that the Hive Levy Act would be replaced. The change in legislation was used to refine and improve the levy aspects that had not been equitable or workable.

The NBA wanted to ensure the levy was payable by all 'commercial' beekeepers. It was important to ensure that there were no perceived exemptions for pollination services, queen rearing, bulk bee production or any of the other 'goods and services' produced by beekeepers.

The NBA wanted to move the level of 'commercial' down from the previous 50 hives. It was felt that a lot of honey can be produced by people with 10 to 50 hives, and they were really doing it for more than just 'fun', and so should contribute financially to support the activities of the NBA.

We wanted to levy in a manner that was *verifiable*. We wanted the levy to be easy to authenticate rather than rely only on a declaration. The old hive levy had depended on a declaration of the number of hives 'as at 1 January.' Effectively, beekeepers were asked to declare how much levy they were willing to pay — it was not an easy thing to establish hive numbers if the beekeepers were uncooperative. When some beekeepers began to abuse the system, it then led other beekeepers to question whether the levy was being collected fairly and completely.

The Commodity Levies (Bee Products) Order 1996 requires beekeepers to consider *all* beehives, regardless of their use, in determining whether a levy should be paid. There are no exceptions for hives that didn't produce a crop for whatever reason, or for hives used (or even *not used!*), for any purpose.

> Every beehive produces bee products, whether or not they produce a surplus, and whether or not you harvest anything — every beehive is considered in the levy order.

Rather than simply rely on a declaration, the NBA wanted a levy that could be double-checked. It was intended that we would send out an invoice based on the apiary numbers on the MAF Apiary Register.

While MAF still maintains the Apiary Register, in a few years time the NBA will be responsible for the register as a part of our Pest Management Strategy. Until that time, we are attempting to obtain the use of the register so that the levy can still be based on the number of apiary sites on the register as at the previous June.

June was chosen as being the time of the year when hives are more settled and when the register itself is considered most accurate. June has always been the time when the register has been used to generate industry statistics for that reason.

No one apart from the beekeeper actually knows which sites have beehives on them at any given time. Rather than falling back to a declaration by the beekeeper, the NBA has developed the levy based on *all apiary sites registered (including any that should have been registered but weren't!).*

The only apiary sites that aren't required to be 'properly' registered are temporary sites, those that are used for less than 30 days (such as the orchards where bees are placed for pollination). All other sites that a beekeeper has registered with MAF are levy payable.

Some beekeepers may not remember exactly how many apiary sites they had on the register as at last June. When the NBA obtains the apiary register, we will compare the number you had registered with the number you have paid levy on and provide you with an invoice or refund for any differences identified.

> All of a beekeepers sites, whether there are beehives on them or not, are counted when calculating the new levy.

The only exemption for paying a levy is for the true hobbyist beekeeper. Hobbyists receive many of the benefits of the NBA's work, such as disease control and marketing. However, it felt that collecting a levy would be both unfair to some extent, and most certainly more expensive to collect than the income would warrant. The exception to paying the levy was written in such a way that *true hobbyists* will not have to pay. Some beekeepers who still consider themselves hobbyists may well need to reconsider their hive and apiary site numbers to stay within the exemption!

> If you have 10 hives or fewer, and keep them on three apiary sites or less, you do not have to pay the levy. You do, however, need to supply a statutory declaration to that effect.

When setting the levy rate, it was easily apparent that a beekeepers first levy payable apiary was the one that 'cost' the NBA the most. After all, each member gets a copy of *The New Zealand BeeKeeper* magazine. Each member is sent a copy of the Annual Report. Each member is sent a voting paper for the Executive elections. These 'fixed costs' were included as part of the first apiary levy, which is why the levy is paid at two different rates.

> A beekeeper's first levy payable apiary levied at $50 (excluding GST). Each additional apiary is levied at $22 (excluding GST).

In estimating the income from the new levy, the Executive attempted to arrive at the same total income as that provided by the hive levy. The biggest impact will be on people who have between 10 and 50 hives — they now have to pay a levy while they did not have to previously.

Many beekeepers will, in fact, pay less

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levy under the new scheme than under the hive levy. Three categories of beekeepers may find their levy obligation has increased:

1. those who have yards with only a small number of hives
2. those with many seasonal sites that have hives on them for only part of each year
3. those who continue to register sites but don't put hives on them.

These beekeepers may well want to consider changing management styles somewhat if the changed levy structure impacts too drastically upon them. The levy will need to be seen as a quite predictable cost of production, one that must be paid, but one that at least has the advantage of being a known quantity before each production year begins.

This is certainly going to be a year of challenge for the NBA as an organisation. As the levy is collected, the NBA must ensure that it is being paid fairly and completely. This is an obligation not only to the levy order but to our membership. Those beekeepers who *do* pay their levy as and when it is due must feel confident that the NBA does all that it can to collect the levy from every other beekeeper who is obliged to pay.

> Many beekeepers will find the new levy to be less than their previous hive levy. Others may have an increased levy to pay. Beekeepers will need to determine the effect of the levy on their business and manage accordingly.

And what of the future? Once the levy collection mechanism has settled in, we will see how close the estimates of income are. Only then will we be able to say that the current rates are appropriate, generating the income that the NBA requires for effective organá[ation. If the income is not as expected, or if the membership wants the NBA to undertake more activity, the levy rates can be changed in a democratic manner through a combination of the levy order itself and our NBA rules.

I have said previously in these notes that I don't really enjoy many of the aspects of being President of the NBA through the current period of legislative and 'social philosophy' change. All of the work on the Commodity Levy Order has been 'inwardly focused'. The efforts are not easy to defend in terms of directly 'putting money in the beekeepers' pockets'. They are absolutely necessary, however, in order to maintain a healthy, stable and effective organisation.

I look forward to getting the apiary levy collection mechanism sorted out and stabilised as that the NBA can move forward at full power again to achieve the gains of which it is capable.

World demand for New Zealand honeys puts pressure on low crop but gives Beekeeping Industry a buzz

The 1997 New Zealand honey crop looks set to be down on previous years.

Unseasonable weather in many parts of New Zealand has affected flowering of many native plant species and could result in honey shortages later this year.

Northland is expected to be 30% down on production, meaning a significant drop in New Zealand's manuka and pohutakawa honey production. Other premium native honey varieties such as rata, kamahi, tawari and beech honey dew are all expected to produce below average quantities this year, although the quality of the honeys wont be affected.

The availability of New Zealand's main honey variety, clover, is still to be determined and will depend on the Canterbury crop as most other areas are expected to produce, at best, average crops.

The possible reduction in the honey harvest comes at a time when world demand for New Zealand's honey has never been greater. New Zealand's 1996 honey exports will be an all-time record (estimate 3000 tonnes and $12,000,000 fob value).

The New Zealand crop has averaged 8600 tonnes over the last ten years with the New Zealand domestic market consuming around 6600 tonnes. A record 11,500 tonne crop in 1994 gave the industry considerable stock reserves but these have now been used up.

The increased demand for New Zealand honey is based on four factors: A worldwide shortage of honey (of all types); an increasing international awareness that New Zealand honeys are drug and chemical residue free (because the New Zealand Beekeeping Industry doesn't feed drugs to its bees); New Zealand honeys, especially manuka, have featured in high profile medical research for their antibacterial values; and New Zealand's native honeys are becoming sought after by leading chefs because of their unique flavours.

As a result the price of New Zealand honey has increased significantly. The benchmark variety, clover honey, has increased in value by excess of 33% during last year. Confirmed export sales already this year have increased by a further 5% again and the price could rise further still.

Although this is a significant price increase over a short period it is in effect just bringing the return to the beekeeper up to parity with the returns achieved in the early 80s. The last decade had been a difficult one for the industry. Internationally there was a drastic drop in prices when the American government released stockpiled American honey onto the international market at subsidised prices. But that stockpile has now gone and a true value based on supply and demand was moving the international price back up. Current pricing should allow beekeepers to start to develop New Zealand hive numbers and export performance.

Because the current price movements are based on export demand the price would have continued to increase even if there had been an above average crop in New Zealand this year. As it is, beekeepers and honey marketers are now having to look at how they can meet the export demand without affecting the domestic supply. This is most likely to mean an emphasis on added-value innovations rather than selling bulk supplies offshore.

The present international situation was helping to soften the negative impact of the high New Zealand dollar for honey exporters. That dollar value had in effect increased the price of New Zealand honey in Japan over 43% in the last three years; without any additional return to the New Zealand beekeeper.

Domestic honey prices are expected to rise this year by more than 25% as export and domestic honey marketers compete to secure supply. But honey would still be a low cost food item at that new price mark and domestic consumption wasn't expected to drop. New Zealanders eat more honey per head of population than any other country in the world at 2kgs per person.

Letters to the Editor

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

Dear Sir

Honey Farm and Okanagan Canoe Holidays (B.C.).

Thank you for your letter published last year, I received a great response.

I still have two openings for people, ideal for people on holiday in the United States or Canada, (yes applications for next year are welcome too).

For the "Shaking" position May 20th to June 10th is high intensity work, 220 hours, but I guarantee $2000.00 for the programme.

Please contact me, Bill Roucka, via fax on 001-250-762-8156

Dear Sir

Health is the best wealth. This is to express my hearty best wishes to you. Thanks to the Almighty, I am well. Thanks again to the Almighty the sun has started shinning through your kindness. That is to say through your untiring efforts it seems there is a chance for me to achieve my case study with Robber Bees may happen.

The International Beekeeping Federation (Apimondi) to whom I also sent the same story of my work has responded most positively, but they have still not decided if I should speak at their Apiculture Congress. They say I have to cover my roundtrip from Ethiopia to Belgium and all costs to stay there from the 1-6th of September 1997.

Is there a sponsor in your country who could assist me to fund the above expenses?

Kindest regards
Azeze Tebo
Box 80, Sidama Zone Ministry,
Awassa, Ethiopia

All enquiries direct to Azeze. Thanks ***Ed.***

Dear Sir

I have a question. I just received my subscription notice, and the only option seems to be for one year at a time. My question is, could I pay two years at a time? It would save both you and myself a lot of trouble, and some money, as postage is fairly high. Paying two years would seem logical, at least to me...

I had the good fortune to be able to visit your fine country for a few days in October of 95, and just absolutely loved it. I visited with any and all of the beekeepers I could find, and just relished every minute of it. I certainly look forward to another visit some day. New Zealand must be the most pleasant place in the world to visit, and the people were warmer and friendlier than I could ever have dreamed.

I keep just a few bees — ten hives last summer, and probably the same this coming summer. I am considered a pretty big beekeeper around here, for as you might guess Alaska isn't exactly a mecca for bees. We ordinarily have nice summers though, and there are quite a lot of wild flowers around, along with some domestic crops. Fireweed (Epilobium angustifolium L.) is an important honey plant — makes an absolutely great clear water white honey — as well as clovers and willows.

Thank you for the wonderful magazine, and I look forward to your reply.

Jerry Cain
Box 57000, North Pole,
Alaska 99705
United States of America

Good point Jerry, I will arrange this for the next subscription year. ***Ed.***

Most beekeepers have in the last week or so received their Commodity Levy Invoice for 1997. The levy is now based on the number of "apiary sites" that beekeepers have as on the 1st June in each calendar year. Unfortunately the invoice form sent out does not clearly state that the intention of our Comm Levy is that as at 1st June each year the levy is to include all sites whether occupied or not with bees.

Obviously this includes all seasonal honey sites. It includes all sites which are registered, presumably with grid references. Short term pollination sites, which are normally not registered, are not leviable.

The transition to a new levy system is going to have take some time for everyone to adjust to so it is very important that everyone fully understands the rules. The intention of the NBA is not to collect any more levy than it did in the past and the maths has been worked through on that basis. The big risk is that the NBA comes up short and fails to collect it's budgeted levy. There is the very real chance of this happening is beekeepers fail to pay the levy on all of their registered sites.

My suggestion is that this particular ambiguity should be sorted out with a rewrite of the invoice form, which fully clarifies this point.

Bruce Stevenson, Kerikeri

Dear Sir

I was interested to read the last *BeeKeeper* magazine to find the BeeFax has been included in the December issue of the *BeeKeeper*. It was with concern that I find that over $400 per month is being spent by our magazine to include the BeeFax in the *BeeKeeper*. This is going to add over $4500.00 to the cost of the *BeeKeeper* annually. People had the option to buy the BeeFax if they wanted it. MAF were also offered a free space in the new style *BeeKeeper* which they declined. I feel to add that much to the annual cost of the magazine is not on, and BeeFax should stand on its own feet. Is the *BeeKeeper* to be increased by the pages taken by the BeeFax thereby further increasing printing costs or is the magazine been down sized to accommodate the BeeFax, or will the hive levy be increased to cover costs?

Graham Cammell

Graham there is no plan to increase the price of The BeeKeeper, nor to increase the page numbers from currently 32. It will be down sized to 28 pages. ***Ed.***

Solomon Island Honey

I have an inquiry from a Canterbury member. Re: **The Sale of Solomon Island Honey in New Zealand**

This honey has been imported to New Zealand under a specific permit. The Solomon Islands have been surveyed extensively for bee pests and diseases over the last few years under a contract from the Ministry of Foreign Affairs and Trade (the work actually being done by MAF Qual Apicultural Advisers, and has also included some New Zealand beekeepers paid for the purpose). Based on that surveying and the sampling that was done, the Solomon Islands have demonstrated that the honey poses no significant risk of causing any new bee disease, nor importing any new pests. The Solomon's have also shown that their agricultural quarantine service has the necessary standards to pick up on any (illegal) importations, they have the laws to ensure that no dangerous imports could be made legally (basically, the same wording that we use!), and that there is an ongoing sampling (surveillance) which would pick up any breakdown in the above. All in all, it means that it would not be possible/ successful/wise to oppose the entry of such honey, as it has been made in the same way that we use to try to get access to new markets.

Nick Wallington

Thanks Nick. ***Ed.***

Marketing

A great year ahead for beekeepers!

It's going to be a good year for beekeepers, as long as your hives are producing.

TVOne News carried an item about this season's honey crop (didn't Mike Stuckey look the part on camera!).....and the story emphasised how the crop was expected to be down on last year.

I was asked for a comment and explained that there looked to be a honey shortage coming up in New Zealand caused by a combination of less-than-average crop plus an increased international demand for our honeys....and that the net result looked certain to be an increase in the price of honey.

Newspapers and Radio NZ have followed up on the same story....and the result has been a fairly good appreciation by the community at large that our honeys are in demand and that prices will probably go up as a result.

And they are! We are aware that 3 containers have been sold this year for $3.15kg FOB. If you allow for drum and freight costs.....that still has to be a $3 minimum to the beekeeper, in the tank! And this wasn't for 0-9 Clover. It was for good Clover honey that was up to 25mm. A specification that includes a lot of our honey crop.

This is also excellent news for the 25-40 colour honey producers; because if 0-25 is going offshore or into premium priced packs on the local market; then the demand for 25-40mm honeys must increase. So it appears that if you're a buyer or packer some serious thought will need to go into how this will affect your markets.

Honey standards...

...the ongoing saga....

99% who got sent a questionnaire said there had to be a Standard...100% a greed that honey varieties had to be what they said they were on the label....but that's where agreement ended because there is no one foolproof and economically viable way of testing honey for type.

But something has to happen. Manuka suppliers will be horrified to hear that one major manuka buyer is reducing his price this year!!!!! Why? Because he still has adequate stocks of (real) manuka honey from last year; despite a record increase in consumer demand for manuka honey. And why, again? Because some people are filling the shelves with honey that is only just/or maybe not even, manuka. And of course, people selling shonky blends with a bit of real manuka in it are happy to sell it for less than a pure manuka honey...because they possibly only paid a bush-blend price to the beekeeper anyway!

So the Marketing Committee has to introduce a voluntary standard....it will be a compromise....it won't be liked by some....but the present situation is absurd....ask a real manuka producer! And it doesn't stop there of course. We're about to initiate some very exciting publicity for Rata honey....how long before bush-pasture blends pretending to be Rata appear on the shelf and price-cut real Rata....and so on. (I tasted some Rata the other day where a single Rata tree must have been surrounded by Kamahi....and quintinnea).

I've got no hassle with price-cutters (although I think it's a silly tactic with the present international situation; but everyone has their own financial situation). But price cutting should mean discounting your product against its own price and like products. What's happening at present is not price-cutting; it's misrepresentation to the customer. It's not in the beekeeping industry's best interest.

A draft standard (initially for manuka only) will be out to the manuka producers for comment by the end of February. And launched end of April, at the latest. I know that's still about two years too late for some and two years too soon for others. Life will be interesting!

Pork roast and Rewarewa Honey in all the supermarkets

Next time you're in the supermarket look for the Pork Industry Boards new recipe card "Successful Roasting". The cover picture shows a superb roast....and the secret to the glaze (and flavour)....Rewarewa Honey. Beautiful recipe from Pork's Pip Duncan, who we introduced to varietal honeys at last year's NBA conference.

New Zealand Honey Education Kit leads the way in New Zealand and the UK

One major New Zealand producer group has taken a copy of our Education Kit and is using it as a model for developing their own. News about the New Zealand honey kit found its way to the UK and we've just been requested to send copies to Bee Clubs' there, and the IBRA.

The kit is an excellent and lowcost way for beekeepers and packers to create good relationships within their own community.....donate a copy to your local school. (The kit suggests a honey tasting in the class and at home....so you could get your honey used too). The kits are available from Ecroyd Beekeeping Supplies Ltd, in Christchurch.

Sugar industry takes a pop at honey

The latest issue of Chelsea's Newsletter has an interview with Dick Hubbard (the incredible breakfast food entrepreneur). Hubbard's heavily promotes the honey content of their products....and with good reason research would suggest. But Chelsea quotes Dick Hubbard in their newsletter saying that he wont give honey a "nutritionally unjustified status over sugar by using it as a replacement". Honey is not just a sugar of course....but we'll thank Chelsea for raising the issue....and research this year will look at defining the biocompounds in hive products and their potential values to the human body. People have just enjoyed honey for thousands of years and had faith in its goodness; we'll look to adding some reasons for that belief.

And in the meantime I'll just keep on enjoying Hubbard's products because of the honeys they use instead of (the far cheaper to buy) sugar in just about every product. I know from our own cooking at home that you get extra flavour with honey rather than refined sugar....and I'll take the potential goodness value of honey as a bonus. That goodness is going to come from the multi-sugars composition; from the biocompounds/ amino acids/enzymes, from the trace elements that science has still to finally determine the roles of in our bodies.

Thanks Chelsea....and I haven't even mentioned that both the Bible and the Koran recommend our product, and nowhere did they suggest, back then, to suck on the end of a piece of bamboo....and that's before you take the goodness out!

Brian Edwards goes honey-tasting

I'll be on Brian Edward's Top of the Morning radio programme, just after 10am, on Saturday 22nd February. We'll be talking about honey and having a honey-tasting on air. I understand that Brian's programme is the most listened-to radio programme in NZ. So good publicity for NZ's honey varieties.

Top chefs go for honey

The trend for leading chefs to use honey instead of traditional refined sugar in recipes is continuing....and as they discover the incredible flavour values of rata, rewarewa, manuka, kamahi and the like, who can blame them.

Charles Noville, winner of best single dish in the 1996 Corbans Challenge, used Rata honey in a sublime dish: *Warm ipi-iti on potato galette, with rata honey-cherry compote.* Charles, executive chef at premier Christchurch hotel, The Chateau on the Park, told me that he gathered a group of chefs together....they tasted a number of honeys....and decided on the Rata. From my perspective that's terrific news: professional, world class chefs treating honey as 'honeys'....and deciding between them for different dishes and different flavours.

(That's obviously a nice Rata, Margaret and Bob Lambie).

Honey on top in TV advert

Doesn't that Tip Top Bread look good as the golden, pure, liquid NZ honey is spread across it in the Tip Top TV advert. The honey looks so good I'd wager its a vipers bugloss from Marlborough....but I suppose someone will be thinking its a classy clover from Canterbury....and I bet a North Islander is proudly saying to friends "that'll be some of my liquid Tawari....best honey in the world" (And I'm looking forward to that free sample, Barry Foster!).

Do you have a range of New Zealand varietal honeys....

I have a potential retail customer for a range of varietal honeys....I need supplier alternatives; those suppliers must be able to produce the highest quality honeys....with proven varietal integrity. Interested? Let me know urgently!

And that's all for this month...

My favourite honey over the holidays?.....tricky! The Rewarewa was great in Sandee's Christmas cake. Some Cardrona liquid-gold clover found it's way into our larder from the Foodwriters Conference....it is sooooooooo smooth! And unfortunately I broke the seal on a jar of Strathdale's Certified Organic White Clover Creamed Honey....and well, I could hardly give it to a customer...so it's been accompanying fresh warm pikelets...what a beautiful white colour and clean flavour! And some Dorothy Squires manuka has been adding a superb flavour balance to my Des Britten Honey Chicken recipe!

Regards
Bill Floyd, Marketing Committee

Experiment with a sting

by Camille Guy

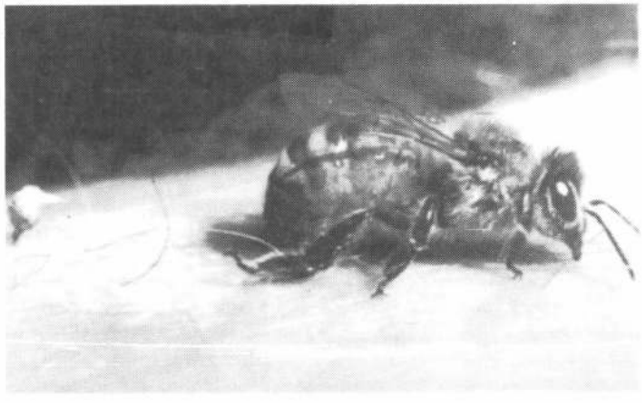
The conventional wisdom about removing bee stings is to scrape them off with a knife, credit card or fingernail. Never pinch them with forceps or fingers.

That advice is challenged by American entomologists writing in the British medical journal the *Lancet.*

Kirk Visscher of the University of California says nothing in the design of a sting suggests that pinching or squeezing it will release more poison than scraping.

A bee sting, detaching from the body of the honey-bee that has inflicted it on a human, drags with it some abdomen, nerve ganglion, muscles and a venom sac.

The nerve ganglion enables the two-lancet sting to work deeper into the flesh, while a valve and piston attached to the lancets pump venom into the wound.



A worker bee crawls after leaving its sting (left) in the back of the hand of Warkworth beekeeper Kerry Fountain.

In other words, it doesn't matter that you squeeze the venom sac while removing the sting — what delivers the venom is not compression of the venom sac but a valve system attached to the sting.

Figuring that speed of sting removal would be crucial in limiting the venom flow, Visscher and two colleagues offered their inside forearms to science.

"We collected a worker honey-bee as she flew from her hive, grasped her by the wings, and pressed her against the skin of the inside of the volunteer's forearm until she stung."

(The term "the volunteer" is macho scientist-speak for "my" — the stings were self administered on both arms and each entomologist received 50 stings).

Some stings were left in the arm for times ranging from half a second to eight seconds, than scraped off with credit cards. Others were left in for two seconds, then either pinched out or scraped or pinched off made no significant difference.

Visscher recommends removing stings as quickly as possible, by whatever means you like, to limit the amount of venom injected.

And get away from the bees' nest, he says. An alarm pheromone emitted at the base of the sting tells other bees where you are, and they're likely to join the kamikaze mission.

Acknowledgement New Zealand Herald

Notes for beginners and others

Firstly some corrections of mistakes found in the December 1996 Notes: The 4th line gives the word "varieties" which should be "variables" and half way down the 2nd column "forest" with the "t" please. The carbon copy of the typed material I submitted to the editor gives the correct words. So don't blame this stupid Dutchman for these errors. (I have taken these and other typos up with the printer — Apologies for them Ed.).

Talking about the variables, we have had the lot for sure. A very difficult October - November period in many parts of the country often resulting in non or poorly mated queens and subsequent supersedure. So there is a lot to say for re-queening using nucs, tops or splits and saving the old queen till there is a good, well mated young one to take her place. Waiting with uniting as long as possible so that one has visible proof and reasonable certainty as to the quality of the young queen. There is a lot of wisdom in the saying: "Don't throw old boots out till you have a pair of new ones."

Then followed December and January with two cyclones, terrible gales, torrents of rain, flooding and so on while in the South, especially in Southland and coastal Otago the temperatures on many days were well below normal. Many colonies were in poorer condition towards Christmas than at the end of September. Also more than a few seem to have succumbed owing to the lack of adequate stores because the beekeeper did not get to them in time for a variety of reasons. All in all not a rosy picture. One of those seasons when no matter what one tries to do nothing seems to work right. However some areas experienced more benign conditions and the rain was welcome in the drier inland districts and especially in North Canterbury. There will still be honey on the shelves.

It all goes to show again that he or she who wants to make a living from beekeeping needs the sort of make-up which can cope with all kind of tribulations. Any beginner who has caught the "bee bug" and plans to go full-time will be wise to consider this. It may not altogether be the lifestyle one dreams about and as for that pot of gold at he end of the rainbow it's very elusive. However with the right temperament, the know-how, stickability and adaptability beekeeping as a career can give satisfaction and sense of achievement. With a bit of luck one can earn a crust and come out on top. Risky? Yes, a bit like an orchard copping the hail sometime, but what the hell, life is full of risks. The decision will be yours, if it does not work out the blame will be yours too.

The 1996/97 honey season is done and over with but for small amounts of nectar coming from late sources. Any surplus honey should now be taken from the hives as soon as possible but mind it should be surplus. Don't forget to inspect the hive you are removing the honey from for any sign of American foulbrood. Better make sure now than be sorry later on. Also it's time to take any autumn re-queening in hand and consider making some tops to carry through the winter. They never go amiss.

For all practical purposes a beekeeper handles and manages colonies. A single bee, except for a queen-bee, is taken little notice of (though when it plants it's sting into someone's skin it is not seldom called some horrible names). That single worker bee is of no value at all. True or false? The last of course for without having a goodly number of individual worker bees there would be no colony. Let us have a look at what this one individual worker bee contributes towards securing a crop of honey and large enough to assure the beekeeper the reward of some surplus.

A well set up of thorough research with regard to foraging was conducted earlier this century (1920s) by O.W. Park of the Iowa State College of Ag while others added to his findings during subsequent decades. Some interesting facts have been established.

The unladen weight of a forager is 80mg. She can carry a maximum load of 70mg which is near her own weight but the average weight of a load of nectar she takes back to her hive is 40mg. Much depends on the nectar source worked, distance and other conditions.

In calm conditions the speed of a foraging bee is 24km per hour loaded or unloaded. This can be increased to 40km for short periods. In a head wind she will slow down but she gains when flying with the wind. Of course a head wind will take more energy.

Mr Park conducted the trials during both favourable and unfavourable seasons. He found that a forager made 13.5 trips per day (10 hours), in the good year but only seven trips per day (7.5 hours), in the poor season.

The average time per trip it took the bee were 45 and 64 minutes respectively which includes the time inside the hive required for unloading the nectar etc. Which proves that under less favourable conditions everything proceeds slower and with more difficulty. Again we meet up with a lot of variables so we have to work with averages. In trying to find the answer to the single foraging bee's contribution we use the following figures as the basis of the calculation:

Distance to the source a hypothetical 3/4km, the bee makes 10 trips a day and carries home 40mg nectar of 40% moisture.

Now some mental arithmetic as I have no computer.

Ten trips there and back over 3/4km clocks 15km. She brings home 10 x 40mg = 400mg or 0.4gms nectar. So it will take 2500 foragers to gather 1000gms or 1kg nectar. As this is nectar holding 40% moisture it will have to be converted to honey with say 18% moisture, an acceptable level. We then finish up with something like 780gms of honey. However there is the factor of expenditure of energy to be taken into account. Ten trips by 2500 bees represents 37,500km, there is the unloading and the handling and ripening of the nectar done by the back up force of house bees before the nectar is converted into honey. All this means energy = honey. How much? Your guess is as good as mine but say for simplicity's sake that it takes 280gms of honey so that it leaves us with a neat 500gm pot.

If a single bee can forage at the above rate for 15 days before she gives up and goes into her well earned retirement for ever, and I think that is not bad in our climate, she will contribute

$$\frac{500\text{gms}}{2500} \times 2500 \times 15 = 3\text{gms}$$

of honey. That would be barely enough to give Bill Floyd a proper taste. But it all counts. It takes an awful lot of bees of the right age at the right time to gather that 30kg honey over and above their own requirements.

Next time you work a hive try not to squash a dozen bees or so when prying out or replacing a comb or slamming the lid back on. There is value in even a single worker bee.

If someone brighter than me or better informed finds fault with the above facts and figures please let me know.

Ref: O.W. Park, Time Factors in relation to the Acquisition of food by the Honey-bee. 1928 E. Crane, Bees and Beekeeping, science, practice and world resources. 1990.

From the Colonies

Hawke's Bay Branch A profile and branch activities 1996

by Colin McLean, President

It was about 10 years ago that I started going regularly to the branch meeting — strange place — all these people and things I knew nothing about. As I was fairly new to beekeeping it was an opportunity to learn more and get to know other beekeepers. It always amuses me to remember the time we had to pass the hat around for donations so we could pay the outstanding bills — we had also passed the secretaries honorarium... well he did get paid... eventually!

It was a time of change then with new interest in beekeeping, expanding pollination, people with high aims and lots of enthusiasm. Activities began to grow with the branch newsletter, field days, the establishment of a branch apiary and regular activities planned for the meetings.

Hawke's Bay is rather a unique branch in that the number of 'one man' businesses you can count on one hand, the region is dominated by three large (family) businesses totalling around 12,000 hives. The branch is run by a core group of very dedicated and motivated hobbiests and a few commercial guys to steer it where needed, it would be a mistake to call it a hobbiest 'club' as the interests of all beekeepers are held as the guiding principle, there has never been (to my knowledge) any differentiation between hobbiest and commercial beekeeper in this branch.

One of the regular activities we have each year is a disease inspection day. Last year we had 10 teams, 32 plus people involved and covered a large area, targeting 'known' people and areas with a history of AFB. The fact that each year we find two or three diseased hives demonstrates to me two things — one, we are doing a good job by finding them, and two, if we weren't doing it then the problem could only escalate. The day was interesting in that every registered beekeeper was phoned to ask if they would like to 'help' on the day? For those who attended it meant some valuable hands-on experience, a chance to meet other beekeepers and rather a good PR exercise. Last year we also ran an inspectors training day, our AAO Ted Roberts was there to cover MAF requirements and procedures, NBA Executive Secretary, Harry Brown and a number of commercial and hobbiest beekeepers all had input into the discussion time, then a hands-on demonstration inspecting a couple of AFB hives and clean-up afterwards.

Both days finished up with a 'barbeque' style meal, a few tinnies and snacks, a social and 'political' (dare I say it?), time to interact and relax. Certainly a goodwill exercise and to show some appreciation to those attending and giving their time.

Another important activity we undertook last year was to assist MAF Border Control at the Hawke's Bay A & P Show. The branch had in previous years held a stand (and observation hive) in the "Children's Zoo" section (appropriate aye?) and had decided this year to give it a break.

We thought that MAF Border Control would benefit by having some volunteer beekeepers to answer questions etc, considering they were going to have a glass observation hive there.

The only catch was we had to front up with some money... Oh dear! No money from the NBA says Harry Brown, the branch didn't feel like coughing-up (figuratively speaking of course), considering we were volunteering some help, this sounds like a Little Red Hen story already — luckily Ted Roberts was at the meeting and did some creative accounting with his budget to save the day.

Apparently it was very successful with a letter of thanks from MAF for our help, one has only to consider that 52% of Border Control intercepts are for honey or bee products to realise the importance of this industry having more involvement in this area.

One issue which has started to become more important and relevant is the funding the branch receives to carry out its activities, one needs to remember that the branch is the "face" of the NBA, usually the first place an individual or organisation will contact when they need to communicate with beekeepers. Our capitation is $212 per year, we're actually pretty generous and pay our secretary a reasonable honorarium. That and the hall hire about cuts it out, the rest of our funding comes from volunteers digging into their own pockets and time to 'do the right thing' for the rest of the industry (and people).

I think it's important for this industry to decide where it wants to go in the future.

It's time the branches were adequately resourced and given sufficient funding to carry out activities which benefit all beekeepers.

This branch intends putting two remits to conference this year — one is for provision to be made in the NBA Administration Budget for branches to be given funding on application (sometimes retrospective) to carry out specific projects or events which benefit all beekeepers — and the other remit, that provision be made in the Disease Control Budget for branches to be given financial assistance to cover costs of running disease inspection days, including a petrol voucher for those supplying vehicles and a light barbeque following, to show some appreciation for the work carried out by volunteers.

I would guess the actual cost of these activities would be one or two percent maximum of the NBA Budget — would it be worth it? I think yes. We've seen the success and progress made when other sections of NBA activities are given adequate funding.

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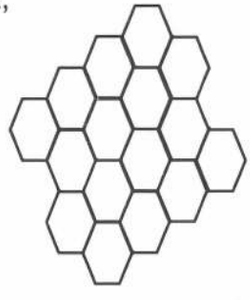

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From the Colonies

Auckland Branch

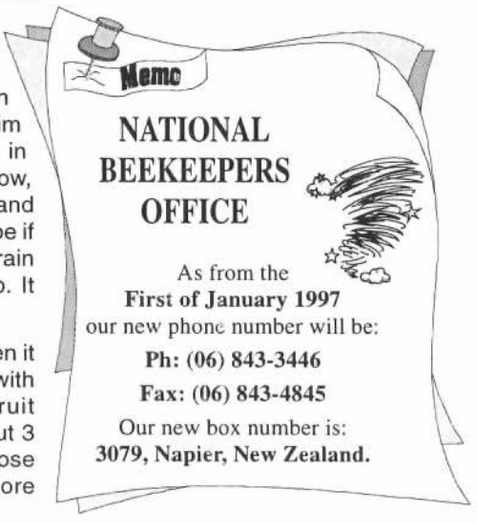
The Auckland Branch area covers a very diverse nectar source area in that it extends from Warkworth in the north, through to the west coast with its areas of native bush, down the hibiscus coast with its lovely reaches of Pohutukawa. Auckland with its domestic floral variety, yet including the heavy bush of the Huanuas and Waitakaries, south to the Meremere swamps with its early seasons willow to the vast Hauraki plains white with clover.

Can I, a mere hobbyist with 75 hives do justice in providing a report for such an area? No, so its over to the phone and hopes that the result justifies the phone bill.

General consensus is that so far it has been an erratic season, with one site doing well and the next not at all. Graham on Pohutukawa has had his best season yet and up 1/3rd. In fact, Pohutukawa seems to be the one bright light available. Brian's Manuka crop is down with pollen decreasing rapidly, while the heavy dark Waitakaries is patchy. My Waikato river mouth forestry site is a disaster while others within 4 to 6kms covering river flats and sandhill swamps are above average. Other locals seem to be 50% down.

Bob with years of experience in the Hauraki Plains says they are covered with clover which is not producing owing to the cold nights and high water table. On the 12 and 13th January a reshuffle of stores saved him from having to feed. With a warming in the last 10 days, clover is starting to flow, but without rain will be lost. Kanuka and Penny Royal are being worked. Maybe if the weather holds and we get warm rain we could get a reasonable late crop. It does happen now and again.

Sac Brood, as bad as I have ever seen it locally is starting to clear up rapidly with this warmer weather. The Kiwifruit pollinators seemed to me to be about 3 weeks earlier than usual, giving those beekeepers and their families a more relaxing Christmas.



William Charles Cotton

Grand Bee Master of New Zealand

Part IV - Auckland

Apologies this should have been the December issue. ***Ed.***

The Bees Taken to Keri Keri

As part of preparations to remove all but one of his hives to Auckland, Cotton used Keri Keri as a staging post. **"Saturday November 9th 1844. My natives called me at 4am, walked slowly for the sake of the Bees. Had a great deal of talk with them (the Maoris) all the way down, about apiarian and other matters. I never had better lessons in Maori than those which I got during this walk. ... We arrived at Keri keri at 8.15. The Hubers hive, and the hive which swarmed last had carried quite safely. But all the combs in that of October 12 had broken down when I lifted it off the cloth, a great many rushed out, and one stung me on the cheek. Such a splendid lot of brood comb I never saw. I proceeded carefully to set the combs in the upper box, and I have no doubt all will be made straight long before they are embarked for Auckland. After breakfast walked again overland to Paihia, the Bay a brilliant dark blue. ... Very happy to find that the obs hive, and that from which I took a Queen are both doing very well. We can see the Queen almost whenever we look into the obs and the whole of the Williams tribe are now almost as expert Queen finders as I am. The Maoris are delighted with a peep and say that the Queen is my 'Tupuna' ancestor because I can hit upon her directly. We all saw her laying eggs today. The circle of royal nurses standing round just as they are drawn in My Bee Book tickling her with their antenae which they move with a rapid quivering motion at the time of the accomplishment."**

A Capital Bee Bishop

"Monday November 11th 1844. Working in the apiary all the morning giving Mrs Williams, who is a most excellent Bee bishop, full directions for the management of his (ie., Henry Williams) **hives during this year, writing down the treatment which each will require. She will make a capital Bee bishop, and Mr Williams is almost as enthusiastic as she. He intends to keep 100 stocks."** Marianne Williams observed in her journal for that day **"Mr Cotton out early about the bees giving directions about the bees and the six hives."**

Keri Keri to Paihia aboard the *Victoria*

"Wednesday November 13th 1844. Up soon after five, wrote journal until twelve o'clock with little interruption and made up all my lee way, which had terribly accumulated during all the work of the last weeks watching the Bees. I have done it so very constantly these last few days, that when I shut my eyes I see Bees, and the Queen amongst them crawling before my eyes. Today whilst we were watching her, we saw her running about very fast in a manner quite different from her usual majestic gait. We lost sight of her and in a few minutes, I who happened to have my eyes upon the lighting board saw her return from a flight in the external air." Next day the brig *Victoria* anchored off Kororareka on Thursday 14th November. Cotton recorded his orders **"My dear Chaplain. The Victoria is arrived. Get all ready for a start at sunrise."**

"Saturday November 16th 1844. I stepped into Mr Williams gig where I had embarked my three swarms of Bees, having left very liberally the parent stock to supply the Waimate district. ... I put my bees in a little wooden house on the deck of the Victoria and packed them tight with carpet bags so that I hope they will go safe. We then hoisted sail again and ran rapidly to Paihia in order to ask Mr Williams to assist me in getting Mrs Selwyn and Mrs Martin on board. Paid a long last visit to the Paihia bees which are flourishing marvellously. The large glass is very nearly full. The honey apparently of a beautiful pink colour. I never saw such a sight. The observatory hive also is a most bounteous sight quite full of combs. An affectionate and sorrowful farewell to Paihia and its inhabitants. They are as sorry as I am that the move must be over with."

Apart from the one hive which was to remain at Waimate, those not initially embarked for Auckland were to reside at Paihia in Mrs Williams' care. Cotton had been preparing some time for the move for Mrs Williams wrote almost two months previously **"Saturday September 21st 1844. Mr Cotton told me he should send all his hives and glasses to Paihia until they were settled at Auckland."**

Cotton's Bees Reach Auckland

The brig *Victoria* reached its anchorage at Auckland on 11pm, Sunday 17th November. On the following day **"Got the whale boat over the side between six and seven. Sent some of the party ashore. Captain Bough lent me his six oared boat for the rest and for my Bees, which have arrived quite safe, and are working as merrily in Mrs M's garden as tho they had not travelled 160 miles."**

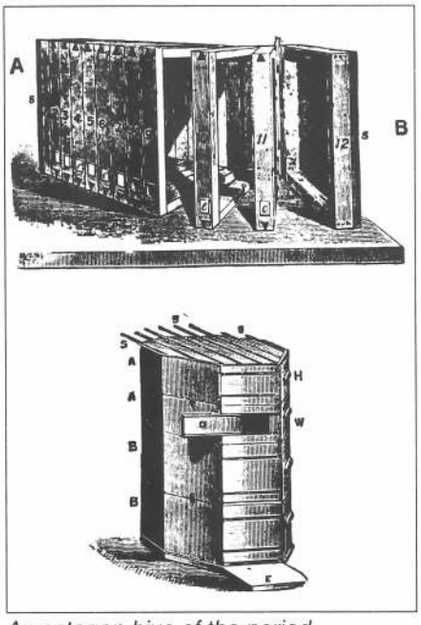
Prior to Cotton's arrival at Auckland, W. Clarke had moved there some time before August 1844, taking with him 'Prince Frederick', a descendant of Busby's original hive. It must have prospered. **"Thursday November 21st 1844. Up at sunrise, a magnificent double rainbow, very heavy showers and I feared it would have been a bad day, but it cleared up beautifully, and was very hot. ... went to Mr Clarkes to breakfast. Took twelve pounds of beautiful honey from one of his hives - I wish friends at home cd have seen our pilgrim family - we live like the Swiss Family Robinsons."**

'The Cotton' Octagon Hive

Back at Paihia, Mrs Williams recorded for Wednesday November 27th **"The bees swarmed from 'Christopher' into Mr Tilfords garden and were put into a large new octagon hive, Mr Cotton's last new experiment to be called 'The Cotton'. A first rate swarm and hive."** The next day she observed **"'The Cotton' hive busy at work."** That day Cotton wrote in Auckland **"Up before sunrise and walked to the top of the hill, the site of the future College. The Bishop and Mrs S ... and little Willie arrived in the whale boat with the**

"The House I live in, 8th August 1845"
Cotton's house and apiary, Purewa Creek, Auckland

morning tide about eleven o'clock." A letter from Henry Williams at Paihia dated three days later is pasted into volume 8 of Cotton's journals. In part it reads **"the 'Great Cotton' had the largest swarm yet seen in these parts. The multitude round the gate way amount almost to a swarm in perpetual motion and all are doing well."**



An octagon hive of the period

A Capital Bee House

"Saturday November 30th 1844. The natives built me a capital Bee house, in a very sheltered spot - which has I think all the requisites for a good 'station' - a little streamlet in front - and salt water within a hundred yards. At eleven o'clock rowed down the creek in the whaleboat ... and had a capital bathe, tho the water was only breast deep."

His First Auckland Swarm

"Tuesday December 10th 1844. Arranged the bees in their new house. The poor Hubers Hive is always in misfortune having no assistant, (the TBH (ie., his friend Rev. Thomas Hutton) being in bed). I let it fall onto the ground and broke out into large combs which gave us a taste of the first Auckland honey - but the breakage turned out most fortunate as will appear below. It came on a glorious hot day. I payed the Bees a visit several times in the morning and they seemed to be doing more work this one morning in their beautifully sheltered station ... in which all the Victorian requisites including water fresh and salt ... about 11 something induced me to pay them one more visit, and a splendid swarm had just risen - it settled high up in a Koramu tree, but my two tables one on top of another, and a box on the top of all I managed to reach them very well. I hived them into the first collateral box I ever had made, that which used to stand seven years ago in Bennett's garden at Cumnor. I had plenty of assistants and pupils, including some natives from the neighbouring Pa ..."

Mulled Wine for the Bee Master

"Wednesday December 11th 1844. ... a capital sail ... we then went to Auckland to do some shopping. I landed at Capt. Boughs and walked up thro his garden where I found him just wishing that I wd drop in. I found him trying to hive a swarm of Bees in the midst of the deluge. They had settled round the bough of a favourite nectarine tree, which he did not like to cut off and so hive them in the regular way. I was dripping and my first request was for some warm wine and water which he sent for and Mrs B ? passed thinking to my great amusement that it was for the Bees and not for the bee master nevertheless it did very well. Poor things - If they could have taken a little it wd have given them food, they were so terribly numbed with the rain. By dint of perseverance and a goose feather I managed to get most of them into the hive, and I hope they will recover.

Monday December 23rd 1844. Took my last swarm of Bees in to Mrs Martin and established them in a Bee house which my natives have built for her." Cotton's subsequent beekeeping at Auckland is well documented within his journals over the next three years. The following entry made a year before his departure is how I'd like to end this episode.

A Damsel in a Sweet Mess

"Tuesday September 15th, 1846. Started at daylight for Auckland, breakfasted with Mr Blackett, who is shortly going for a visit with his wife, to his relations at Hobart Town. They will be away about three months and I shall miss them much. Before breakfast I took some beautiful honey from their hive - and then did the same for Mrs Leach, and Mr Churton. At twelve I got on my pony and rode to town. ... called on Mrs Berry and Mrs Turken, and then rode over to the house of a man called Souls (?Soulis) who was Captain Bennett's servant. When he died about 16 months ago he left his house and grounds to his servant - who now gets his living by his fruit and vegetables. Last year he had 144 doz ripe peaches on one tree, only 4 years old - and these were sold in Auckland at 1 shilling a doz. The garden is in a lovely gulley. Very nicely laid out in terrace walks. A great deal of natural wood, tree ferns etc, are left standing - and the fruit trees are now in full blossom. A most glorious sight. Took 29 pounds of honey from a top box of his, while they were separating the fine honey combs from that which was to be run out, one of his little children tripped backwards, and fell into a large dish of honey, which was on the ground. She was a little petticoated damsele of about 4 years old. And so was in a sweet mess, as may be imagined."

Peter Barrett, November, 1996

References

1. Barrett, Peter J. (1995) The Immigrant Bees, A Cyclopaedia on the Introduction of European Honeybees into Australia and New Zealand, Springwood, Australia
2. Cotton, William Charles (1841-1847) Journals, No. 8, Mitchell Library, Sydney
3. Journal of Marianne Williams (1844-1850)

Notes

1. Words are underlined where handwriting is unclear.
2. A '?' indicates indecipherable script.

Acknowledgments

Thanks to Bruce Stevenson of Kerikeri for his research into the journal of Marianne Williams.

Library News

We received a pretty large collection of **HONEY LABELS**, both New Zealand and overseas, from Mr C. van Eaton, MAF, Tauranga. Added to what the library already has it is becoming a very interesting item. These will be gathered in a clear file, available to anyone who would like to get some ideas.

It would be nice to extend this collection, so if you would like to donate your label(s) it would help it along. Thank you Cliff.

The New Zealand Honey-bee by Daryl Crimmins. Copy of an absolute excellent assignment by a 6th former. If you are requested to give an address on bees and the beekeeping industry to a group of people this paper would be a very good basis for it. That's a compliment.

From a thoughtful donor, sorry I don't have a name, the following copies of articles:

Fraser C.H.C.The Honey Bee (Cawthron Institute Bulletin No. 17) 1935, 2pp, NZ.

Thomson R.H.K. The Chemistry of Honey (Cawthron Institute Bulletin No. 25) 1936, 2pp, NZ.

Thomson R.H.K. Chemical Composition of New Zealand Honey. 1936, 4pp, NZ.

Thomson R.H.K. The Colour of Some Typical New Zealand Honeys. 1938, 4pp, NZ.

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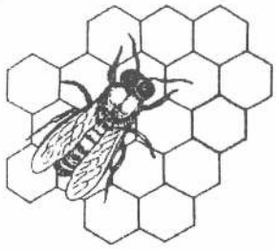

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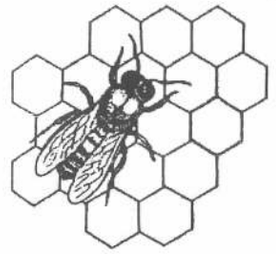

Strong demand

Due to strong demand from our overseas customers, we will again be paying high prices for beeswax exported through us this season.

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Just because you are in the North Island and we are in the South Island, don't think that we can't sell your beeswax for you. As our name suggests, we buy and sell beeswax anywhere in New Zealand. Just tell us where you are and what you have to sell and let us organise the rest.

Logic

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Random Thoughts — Beekeeping

Today's random thought is about silliness — or the lack of commonsense in dealing with people.

My mate Fred is a regular saint, he would not knowingly do you down with a malice forethought, merely sometimes it is an after thought. To say he is a saint may be going just a little too far, too soon, but no doubt would depend upon your point of view. To illustrate the point, you should be made aware of the recent ruffling of feathers at the local school.

In our community the school is often the focal point for activities run by groups of assorted variety. The fact that we, as a community get good value from having the amenities available after school hours goes without saying. Scouts, Cubs, Brownies, Girls' Brigade, tennis, soccer, football, drama club, art club, rockhounds, all share in the use of the school buildings and grounds. So it should be, the community after all paid good money to the government to have the school there in the first place.

Recent changes in the operation of the school management and control has seen a much greater involvement by the parents, and the school is now required to reflect the needs and character of the local community in the day-to-day operation and syllabus structure adopted. This in itself is a good thing for many communities, and school buildings formerly locked up after school finished for the day, now reverberate until late in the evening with occupation by local groups.

Our local school followed this pattern, and things were going along nicely until the beekeepers were told of an increase in the rental of the rooms they occupied once a month down at the local community centre. Seems that the newly elected council had decided being civic minded was fair enough, but the community should now operate on a pay as they went basis, and so increased the rentals for the use of the community centre. The treasurer did some sums on his calculator and came to the conclusion that a subscription increase would be necessary. Having just had a rise of subscription at the last Annual General Meeting, necessitated by the loss of bulk postage charges, the committee felt it imprudent to burden members with any further costs. The pay as they went policy of the council was to be put into effect, the bee club would relocate to new premises. Following enquiries, the local school was approached, and a tentative agreement reached.

So far so good, all straight forward stuff, as those with experience on committees would appreciate. However, ten days prior to taking up the new meeting site, things went sour. Apparently two members of the local school board were against the room being occupied by the local beekeepers club, and forced a postponement of the decision being confirmed. Their reasons were not initially made clear, but it finally came to light that the beekeepers drank mead at their meetings. This was a known fact to these board members, as one has attended the December meeting of the Bee Club and seen for themselves the uninhibited drinking by club members. Shocking!

An urgent meeting with the chairman and secretary of the school board was arranged, and Fred, being the Club Chairman, was authorised to endeavour to clear the matter up. Off they went, Fred, Jerry — the Bee Club secretary, and Joe — the longest serving member of our committee. Now, being a smallish community, the participants knew each other well, had business dealings virtually everyday, so lots of goodwill existed all round.

This fact did little good to the cause, however, as when the facts became known, the chairman of the school board stuck to his guns and made quite clear that they could not countenance such goings-on in the school precincts. Minutes of the Bee Club, December meeting were produced and read to the school board members. These showed the normal meeting pattern, apologies, previous meeting minutes being confirmed, matters arising, correspondence, general business, then the main topic, the annual get together and supper, during which the results of the annual mead contest would be announced. The judge was to be "X", who was renowned in the wine industry as a judge of the highest calibre. Winners of the contest were then listed in the minutes, and the winner of the first prize presented with the trophy. Supper continued and the meeting closed at 10.15pm. The entries for the contest were made available for members to taste during supper, some eight bottles in all. Attendance at the meeting was good, with 42 members and five visitors being present.

Nothing untoward it would seem, yet the school board members would not budge. Eyewitness evidence had been received, and they were sorry to turn the Bee Club down, but the interests of the wider community were paramount. Fred naturally was disappointed, as were Jerry and Joe. Their denials of any unseemly behaviour having occurred had fallen on deaf ears.

The following day saw a council of war formulated at the regular meeting place of working men at the end of the working day. Fred had done a little digging around, had identified the informant, and was surprised. This lady had attended the December meeting of the Bee Club, her name was on the list under "visitors." She had shown a lively interest in the meeting, and had been seen to taste the meads during supper. She also expressed interest in joining up with the club, obtaining a hive of bees and become involved in the world of beekeeping. Why then was she now so opposed to the club using the school room once a month? Jerry also had been busy, and had been talking to a mate who was related to the lady in question. Seems that she was an avowed teetotaller, and that she actively supported the local temperance group. Apparently she had mentioned at the last temperance group meeting her tasting of the mead, and had been roundly assailed by those present. It was only at this point she realised that mead could be alcoholic. The resultant loss of face had reflected in her stance as a member of the school board. Those wicked beekeepers had tricked her into imbibing alcohol, therefore were not to be trusted.

Joe was all for going round as a group to "have it out with her." Fred pointed out the odds would be in their favour of being classed as using intimidation methods, and would result in lack of sympathy toward the Bee Club. Better to think about what was to be done, and that is how things remained for a few days.

To say that Fred left no stone unturned would probably be a slight exaggeration. The undeniable fact was that he moved around many prominent members of our local community, and sowed the seeds for a scheme, aimed to promote the Bee Club in their eyes. The first visible sign was during the weekend following the fateful meeting with the school board. The local Saturday market had a series of stalls manned by volunteers raising money for the local group. These are provided at a peppercorn rental by the promoters of the market. There were Fred and the committee serving up pancakes and honey on payment of a modest sum, all proceeds go to the local school to help their swimming pool fundraising. Add to this effort a pamphlet from the Bee Club offering voluntary labour to clean up sections, with donations to the school for their efforts, and you can start getting the message.

We of course missed out on being able to use the school as a meeting place for that month, but had lodged an appeal to be heard at the next meeting of the school board. Fred also arranged a supper evening for the committee members of both clubs, with their spouses, and by coincidence, the judge of our mead competition was in town and would be attending. Now it is generally regarded in our club that whilst Fred makes a good brew, his mead is a little on the rough side for most palates. Jerry

Continued on page 16

Continued from page 15

also makes a passable brew, but Joe has the knack that has given him the edge over the years to win the "Most Favoured" mead contest amongst club members. So much so that he voluntarily refrained from entering that fateful December contest.

The supper was a modest affair, starting with an entree of crayfish with sauces, and followed by a tasty selection of meat dishes, all cooked to perfection to farm recipes that have been in Fred's family for generations. Naturally, to help with the ingestion of such good food, and being beekeepers, a supply of Joe's superb mead was available to the guests. Home made cheeses rounded off the evening as coffee was being served. Not once was the subject of renting the school room made mention of as the evening progressed. The chairman of the school committee was the last to leave, and he discreetly asked Fred if that unused bottle of mead on the table could be allocated to a good home, namely his. Without a word, Fred produced a wrap, and saw his guests off the premises. I forgot to mention that only one invited guest was absent.

Two days passed, and the phone calls from the guests had all expressed appreciation of the evening. The third day saw a repetition of the stall at the market, with sales of honey added to increase the turnover for the day. The results from the two days swelled the swimming pool fund by $140, not bad for a spontaneous effort by Bee Club members. Our club meetings had been held at the old venue, at the new rental rate, and members were informed of the lack of progress in obtaining the new venue, but not the reason behind the decision of the school board. The following week came and Fred, Jerry and Joe attended the meeting of the school board. Apparently the meeting was uneventful until the subject of the Bee Club renting a school room was raised as next item on the agenda. The matter was discussed favourably by board members until it was the turn of one member. The meeting was then regaled with a lurid tale of the duplicity of the Bee Club members, the consumption of alcohol by said members and the generally uncouth manners of the club members. The chair then asked if a member of the Bee Club would care to speak to the motion before the board, Fred rose, and admittedly he would not make a brilliant after dinner speaker, but his words were brief and to the point. His club members were not in the habit of indulging in imbibing alcohol at all meetings, only once a year at the December meeting when the annual mead contest was held. Consumption was minimal, confined only to the disposal of entries to the mead competition, with the aim of letting members become acquainted with the differing tastes of mead brewed from local honeys. Not a word was said about the supper evening. The vote was then put, passed with only one dissension and the board moved on to other business.

The next club newsletter advised members of the new venue site, and an extraordinary number of members turned out to view the new premises. A unanimous vote was passed to hand over the proceeds of the market days to the school board, and a whip round at the meeting resulted in a further $40 being added to the kitty. Nice one Fred.

Ham Maxwell

National Beekeepers Association of New Zealand Inc Southern North Island

Field Day — BAR-BE-QUE

Date: Saturday, 22 February 1997

Time: 10.00am

Place: **CAMP RANGI** (Old YMCA Camp) TOTARA RESERVE — In the beautiful POHANGINA VALLEY. $5.00 per MEMBER, $10.00 per FAMILY — Look for the signs at Raumai and Totara Reserve.

AGENDA

10.00	**REGISTRATION AND MORNING TEA**		
10.30	Welcome by Robin who will introduce us to Totara Reserve and confirm the programme.		
	MORNING SESSION HAS PRACTICAL ASPECTS FOR ALL BEEKEEPERS		
10.30	Autumn Re-queening (cells and mated queens). Over wintering Nucs and Splits — various methods. (Other topics to be advised).		
12.00	**LUNCH**		
1.00	Pollen trapping and local sale	-	John Brandon
1.30	Overseas Market update (Propolis, comb honey etc).	-	Sue Walker
2.00	Changes in my Honey House	-	Garry Tweeddale
2.30	Bulk handling of honey drums	-	Demonstration
2.45	National issues update	-	Harry Brown
3.00	Afternoon Tea (walk around/visit the area).		

LATE AFTERNOON BAR-BE-QUE

Bring along interesting gear for display or demonstration. Don't forget your protective gear, sun hats, sun block, lunch and something for the evening Bar-be-que. (A blanket and umbrella to sit on and under).
Flying Fox and swimming in the river is available for the children.
Tea and coffee provided.
The Pohangina Valley is inland from Ashhurst. The Totara Reserve is approximately 12km further up the East Valley Road from Raumai.

— We hope to see you all there —

F. Lindsay (Secretary)
26 Cunliffe Street
Johnsonville

Rob Johnson (President)
Whelans Road
Levin

BeeFax

Vol. 2, No. 4 February 1997

CERTIFICATE CHANGE SAVES COSTS

A recently announced change to the export certificate for live bees to Canada is likely to substantially reduce MAF Qual charges to beekeepers this export season.

The change was negotiated with the Canadian federal government authorities by Dr. Jim Edwards of the MAF Regulatory Authority, and was released officially on January 22.

Export certification procedures for the Canadian market are currently being redrafted to meet the requirements of this new certificate by Ted Roberts, MAF Qual's export certification manager for bees and bee products. The change will result in a cost savings to supplying beekeepers of up to $11 per apiary, since MAF Qual Export Certifying Officers will no longer have to do area freedom clearances for apiaries supplying bees to Canada.

Shipments of package bees from New Zealand to Canada are likely to increase substantially this autumn to satisfy a greater demand from Canadian beekeepers who are expanding colony numbers in response to continuing high prices for their honey (see articles elsewhere in this issue).

WHERE'S THE HONEY?

Beekeepers in most parts of the country would have nodded in agreement with the recent TV1 news item reporting on below-normal honey production this year. The item dealt specifically with a one third reduction in crops in the Auckland area, but judging from reports from other parts of New Zealand, the situation appears to be quite similar in a number of areas.

The crop, which is always earlier in Northland, Auckland and the Coromandel, was seriously affected by wet, windy conditions in late spring. Manuka crops in those areas will be well down, although other sources did produce average crops of honey in some places.

That same late spring weather seriously affected early hives in kiwifruit pollination in the Bay of Plenty, as well as those hives either waiting to be shifted in, or remaining on honey sites hopefully to look after themselves. Hives coming out of pollination were not as strong as normal, and many were quite light for stores, despite the regular and routine in-orchard sugar feeding.

Cold nights and too much grass seems to be the problem in the Waikato. As one beekeeper put it, "The clover is there, but unfortunately the honey isn't".

The weather hasn't been much kinder in the Central and Southern North Island, although some later manuka may be produced.

In fact, the only exception to the rule in the North Island seems to be Hawkes Bay, where rain at the right time, and dry weather during the manuka flow has meant that a good crop is likely. The clover flow, on the other hand, has been more variable.

In the South Island, Southland has had the worst of the weather, with cold and wet right through spring and early summer. Central Otago may produce a fair amount of honey in most areas, and the Mackenzie Country looked good until they got a heavy frost.

The West Coast has had some dry weather during all the rain in the east, and crop prospects look good there, as they do in Marlborough. The Nelson area, however, is more patchy.

Canterbury was worrying about drought before Christmas, but over 100mm of rain fell in early January, complements of Cyclone Drena, which has set things up quite nicely.

A late flow, in fact, is what most beekeepers around the country are waiting for, and with the way the season has gone so far, it certainly is on the cards. But as we move towards the end of January, the chances of bee populations in hives being at a level which can take advantage of late nectar is greatly diminished. Still, according to the old timers, we have had good crops of honey produced in New Zealand in February. So let's keep our fingers crossed!

WORLD PRODUCTION DOWN (AGAIN)

One of the reasons it would be nice to have a bumper honey crop in New Zealand is because world honey production is expected to be lower again in the year just completed.

According to the US Department of Agriculture, honey production in the six biggest producing countries (China, the United States, Mexico, Argentina, Canada and Germany) is forecast to be 338,000 metric tonnes in 1996, down 26% from 1995. Only one of those countries (Mexico) reports an increase in production compared to the previous year.

China, the world's largest honey exporter, has had a 49% reduction in honey output, due mostly to unfavourable weather and a reduction in beekeeper numbers. Chinese consumption is also forecast to fall in 1996, due to the fall in production and the likely increase in the domestic price.

The United States is reporting an 8 to 10% decrease in production. The main reason is the reduction in colony numbers, down 19% in one year, and almost one third since 1990. The varroa and tracheal mites are the main culprits.

Argentina, currently the world's second largest honey exporter, is reporting a 25% drop in production compared to 1995. The lower production was brought on by drought during the summer, which reduced yields and delayed harvesting of the honey.

And in Canada, production is likely to be 10% lower than last year because of a harsh and prolonged winter. However, despite the expected fall in production, Canadian beekeepers are optimistic because of increased prices, and will be rebuilding colony numbers in the coming season.

Mexico's crop is predicted to reach 60,000 tonnes, up 20% on 1995. However, output has yet to exceed the peak of 69,000 tonnes set in 1991. The current increase is reported to be due to a new policy encouraging beekeepers to utilise coffee plantations for honey production, with a subsidy being paid to the beekeeper to cover the cost of requeening to non-Africanised stock and treatment against varroa.

The 26% reduction in world production is the third decrease in a row. In 1995, production fell 4%, while in 1994 it was down 3%. World production is a full one third lower than in 1993, the last year when an overall increase was experienced.

[Source: *Sugar: World Markets and Trade*, USDA]

BEE NEWS AROUND THE WORLD

Honey Prices Up-Up-Up - In the October 1995 issue of *BeeFax*, we reported on the US federal government imposing a duty on Chinese honey, and the subsequent rise in honey prices in North America. Canadian honey was expected to fill much of the vacuum in the US caused by the Chinese honey being priced out of that market. Since that time, the US government has imposed a maximum volume quota on Chinese honey, which limits such imports to 20,000 tonnes at a minimum FOB price equal to 92% of the average price of all other honey imported into the US.

In October 1995, Canadian honey was selling at between NZ$1.71 and NZ$1.86/kg, although prices as high as NZ$2.44/kg (CDN$1.00/lb) were being reported. Now that the 1996 crop has been harvested and is being sold in Canada, the news is that prices are continuing to rise. The Autumn 1996 edition of *Canadian Beekeeping* magazine reports that bulk honey is being purchased from commercial producers at between NZ$2.92 and NZ$3.16/kg. Farm gate prices (gate sales) are around the NZ$3.51/kg mark, although the Ontario Beekeepers' Association is recommending NZ$4.68/kg.

According to the magazine, the wide variation in prices can be attributed to the differing financial positions of honey producers, with some needing to sell honey quickly at a lower price to clear debt. In the September 1996 issue of *BeeFax*, we reported that some 1kg retail packs of honey were being put onto Canadian supermarket shelves at the same price as some 500g packs (CDN$3.99).

Border Opening Vote Taken - The September 1996 issue of *Alberta Bee News* reports on the results of a survey of Alberta Beekeepers' Association (ABA) membership regarding the limited opening of the US-Canadian border to queen and packages from the US. In August, 79 voting papers were sent out, with 65 valid replies received (an excellent response rate of 82%).

The ballot paper asked beekeepers if they were in favour of allowing the importation of "treated" packages and queens from the continental US. By "treated" they meant that Apistan strips would be put in the packages and queen cages to kill varroa mites. Of those who voted, 54% were against the proposal. The paper also asked of those who voted "no" whether they would be in favour of just allowing the importation of treated queens. Only 8 beekeepers voted for this proposal (23%). The survey results have been forwarded to the Alberta Minister of Agriculture for his consideration.

Apimondia '97 - The 100th anniversary of Apimondia, the World Beekeeping Congress, will be held in Antwerp, Belgium, September 1-7, 1997. The conference commemorates the first such meeting of Apimondia, which was also held in Belgium just before the turn of the century. The general theme of the conference is "Ancient and Recent Beekeeping History". Session topics include honey consumption and marketing, honey bee

biodiversity, alternative control systems for bee diseases, bee pollination in developing countries, and apitherapy. For more details contact the Apimondia General Secretariat, Corso Vittorio Emanuele 101, Rome 1-00186, ITALY, phone/fax 39-6-685-2286.

Sauna Honey (!?!) - In Finland the sauna is a national pastime. Finns like to have a sauna at least once a week. They get a sweat up in the super-heated sauna room for 10 minutes or so, and then take a cold shower or a dip in a nearby icy lake, repeating the whole process 2 or 3 times.

Recently, Finns have started using honey in their saunas. During the heating process, they rub the substance on their hands, shoulders, hips and knees. The belief is that the honey helps soothe aching joints. The honey gets washed off when they take their post-sauna dips.

The practice has now become so popular that Finnish beekeepers are marketing special "Sauna Honey". The honey tends to be lower grade, but predictions say that saunas will eventually use at least 20% of the national crop. With less honey to go around, the use of honey in saunas is also starting to increase the price of higher quality table grades.

[Source: *Australasian Beekeeper*, October 1995]

Bee Brains and Drug Addiction - Bees are helping scientists unravel the mysteries of human drug addiction. Writing in the British science journal *Nature*, investigators from the Baylor College of Medicine in Houston, Texas, report that their computer model of a bee's brain is shedding light on how drugs can subvert the mechanism that controls cravings.

In recent research on the honey bee, the scientists have identified a neuron called Vummx1, which they say is responsible for keeping the insect up-to-date on the richest supply of nectar in an area. The neuron is responsible for providing the odour processing regions of the honey bee brain with rewards based on nectar collected. Once they understood the action of Vummx1, the scientists created a model of how the bee brain works during foraging, and how bees learn to avoid risk. The researchers hope to apply the model to human behaviour, and particularly to the role of brain dopamine in addiction.

[Source: *Speedy Bee*, November 1995]

NZ Lowest for Ag Subsidies - According to a recent survey, New Zealand continues to have the least subsidised farmers of any country in the Organisation for Economic Cooperation and Development (OECD). The OECD's latest annual evaluation of agricultural policies, markets and trade puts the value of New Zealand's agricultural support at 4% of total agricultural production. Only this country's poultry farming stood out as having a relatively high level of support, in the form of sanitary provisions to keep New Zealand free of bird diseases. Disaster relief was the only source of direct payment available to New Zealand farmers.

Australia had the next lowest level of farm subsidies, at 9% of total production, while Switzerland topped the lists at 81%. Japan and Norway were also very high, at 77% and 74% respectively, while the US weighed in at 15%. The average for the European Union was 49%.

[Source: *Evening Post*, May 1996]

BACTERIAL RESISTANCE AND HONEY

The development of antibiotic resistance by bacteria is a major concern to world health. The antibacterial properties of honey are now being investigated because honey may give us another weapon in fighting bacteria which have become resistant to man-made antibiotics. Some floral sources of honey have been able to inhibit the growth of some of the most concerning resistant bacteria under strict laboratory trials.

However, the question is often asked, what causes bacteria to become resistant to antibiotics?

Within some bacteria are small circular DNA bodies known as plasmids. These are simply two small complementary DNA strands in a circle. Each of these circles contain a few thousand molecules of DNA material known as bases. These bases combine together to form DNA strands in such a way that they can act like a 'blue print' for the formation of proteins that can have important functions in the bacteria.

This information is contained in a unit known as a gene. A gene may carry information for the inactivation of an antibiotic drug. There can be a number of different genes in a plasmid, all forming proteins that can inactivate antibiotics.

Plasmids are found separate from the bacterium's main DNA chromosome. A chromosome is the term for the DNA when it is packed away within the bacterium. Plasmids, on the other hand, are not always necessary for the bacterium's survival.

However, the plasmid can be responsible for inactivation of an antibiotic by blocking the mechanism of the antibiotic. The blocking is undertaken by a protein formed in the bacterium as a result of the information contained in a gene on the plasmid's DNA complex.

This information can be passed on from one bacterium to another in a process known as 'conjugation'. This is when two bacteria come together and a single DNA strand from the

plasmid's duplex separates and moves though to the reciprocating bacterium. Once in the host bacterial cell, both single strands are matched up by new DNA molecules that complement the DNA bases. The plasmid becomes once again a double-stranded DNA circle.

This sharing of information is very important to the survival of bacteria and is the reason medical people are so concerned about the future of antibiotics. Whole wards in hospitals have been quarantined as a result of outbreaks of resistant bacteria. Without a way to fight these bacteria people can suffer serious infections and even die.

Honey trials conducted under very strict controls at the Waikato Hospital have shown that honey of different floral sources can have an effect on resistant strains of bacteria. In a number of cases the effect has been total inhibition of growth.

This is quite exciting since it promotes possible future reasons to use some honeys as wound dressings. Cases have already been reported where the use of honey has promoted the healing of wounds which have not responded to other conventional treatments.

Honey has been used in medical situations for centuries. However, with good medical research we may see it accepted by even the most critical members of medical community.

- James Driscoll, AAO, PALMERSTON NORTH

HIVE DESTRAPPER

If you've ever come across a strapped hive on a diseaseathon, you'll know that trying to remove the plastic strapping without either breaking it or cutting it can be a tricky job.

Some beekeepers are quite adept at using the bent-over end of a Kelly hive tool to lever off the tension on the strapping buckle. Sometimes this works all right; other times it can take you as long to loosen the buckle as it takes to look at the hive. This is especially true if the strapping is fastened with one of those plastic buckles.

A number of years ago, John Foster, an enterprising beekeeper from Gisborne, invented a nifty device which does away with all this fiddling. The device, which for want of a better term we'll call a "hive destrapper", loosens any type of buckle immediately, saving the beekeeper both a bit of time and a lot of frustration.

John and his son Barry needed a quick and effective destrapper, because beekeepers in the Gisborne region have traditionally used plastic hive straps to secure their hives, which are often placed in dry stock paddocks.

Pictures and drawings of the destrapper were included in an article written by Trevor Bryant which appeared in the Autumn 1992 edition of the *New Zealand Beekeeper*. The device consists of a piece of 10mm steel rod bent into a crank handle, and two pieces of 15x50mm 5mm steel plate welded at a right angle on either side of the long end of the rod. The two pieces of plate form a "mouth". The strap buckle is placed in this mouth and then the rod handle is lifted. The result is a loosened strap, first time, every time.

Lots of beekeepers have shown an interest in the Foster's hive destrapper. In fact, in 1989 the destrapper won the gadget prize at the Waikato NBA field day. But not all of us are proficient welders, and so the Foster's have made a number of the destrappers for beekeepers over the years. They have recently improved the device by adding a roller handle. And they have also painted the device a bright orange, so that hopefully a certain Apicultural Advisory Officer can find the thing again when he leaves it in an orchard!

You can get your very own Foster Hive Destrapper by sending $20 + $3 postage to John and Barry Foster, 695 Aberdeen Rd, GISBORNE, phone/fax (06) 867-4591.

And From the "Believe It or Not" Department...

TURBO-CHARGED SMOKER LIGHTING

If you really want to amaze your beekeeping friends, try this the next time you fire up your smoker. Get a piece of sacking, and start it in the normal way with matches or a disposable lighter. Then hold the smoldering material up against the exhaust pipe of an idling diesel vehicle. The pressure from the exhaust will fully ignite the sacking in no time flat!

We understand that this method only works with diesel motors. If you try it on a petrol vehicle, the water vapour coming out of the exhaust will actually put the sacking out (and hopefully not blow up the vehicle!)

Thanks to Bruce Stevenson of Kerikeri for showing us this particularly novel beekeeping party trick.

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

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

AN APOLOGY

We would like to firstly apologise to our customers who bought queen excluders and galvanised lids from us earlier than they would normally have done so, in order to purchase at our special prices that were valid only up until the 31st January 1997. We apologise because we have had to extend this special deal until the 31st March 1997 as we did not sell as many queen excluders or galvanised lids as we had hoped. It is against our general policy to have an expiry date and then extend it, however in this case we feel we have no option.

We still have a large quantity of absolutely brand new, first grade excluders and lids at excellent prices, as listed below.

HEAVY DUTY (2mm wire)

QUEEN EXCLUDERS

FROM $5.95ea +GST

QUANTITY	GRIDS ONLY	ASSEMBLED WITH WOODEN FRAME
1000 or more	$5.95	$7.75
500 to 999	$6.30	$8.10
200 to 499	$6.70	$8.50
100 to 199	$7.20	$9.00

HEAVY DUTY (22 gauge or 0.75mm)

GALVANISED LIDS

FROM $6.70ea +GST

1000 or more	$6.70
500 to 999	$7.00
200 to 499	$7.40
100 to 199	$7.90
10 to 99	$9.00

USUALLY $9.50 +GST each per 100

These lids are from prime first grade material, and are pre-folded to perfection by automated machinery. Standard internal dimensions are 515mm x 408mm x 84mm. If you require a different size, we may be able to accommodate your requirements at the above prices.

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Beekeeping Memoirs

Inventions

by Ron Mossop

When I was a little boy my father invented a number of things. Years later he told us that he made little money from his inventions, but the Patent Attorneys and manufacturers and done much better... I kept this in mind and never patented anything myself. Looking back over the years I doubt whether I had ever made anything worth patenting anyway, but like most beekeepers I was always looking for something to make the job faster and easier.

About 1952 I bought six hundred beehives in the Te Aroha-Patetonga Swamp and the Kaimai Range area. They did well on a variety of willows, and later on buttercup and barberry. I found that if I split them early and put one of Allan Bate's queens in the new split and then put another super with some frames of honey on top of each split that by the first week of December they were heavy two-box hives ready to work the tawari trees in the Kaimai Ranges. I was a one-man outfit at the time and the only way I could think of getting them on to my truck was to lift them there myself. So at dawn I would arrive with my truck and two short hand hooks. I would bend over the hive, put the two hooks under the floorboard and lift the hive on to the truck. I will never know why I did not do my back a mischief, and I did think that there must be an easier way to do the job. Forty years later we use three men per truck to shift hives into and out of Kiwifruit orchards. During those forty years we have tried five different mechanical devices to put hives and honey on to our trucks. They all proved too slow, unreliable or too dangerous to be satisfactory. The first two were motor-driven wheelbarrows. The next two were boom loaders worked by the twelve-volt truck battery. The fifth, and last, was hydraulic. All these inventions were supposed to be the answer to a beekeepers' dream, but they were not always so.

A beekeeper from the Waikato could only watch with dismay at his hive swinging out of reach in mid-air when his Kelly boom loader stopped and would not go up or down, or alternatively a friend with a honey loading barrow, when the motor stalled whilst he was at the top of a steep ramp on to the back of his truck and he had to run backwards to escape being run over by his runaway barrow loaded with four supers of honey. In my own case, I experienced going along the side of a hill with a hive barrow and four supers of honey when the down-side wheel went into a hole and the barrow and load flipped. The long handles caught the pocket of my overalls and flipped me as well. There is also the story of a South Island beekeeper who tried in vain to get his bee-blower motor started and lifted the machine above his head, subsequently running towards a nearby stream to get rid of the thing but had to be restrained form doing so.

Something useful came out of my early efforts to shift hives from the Patetonga Swamp to the Kaimai Ranges. One morning I was going across the plains at Waitoa. When I got to Jim Mackisack's home and honey house there was a gang of Power Board men dragging wires across the road and up power poles. There were at least three men up ladders and other men on the road. They stopped me. After awhile they waved me on, so I drove off blissfully unaware of the shambles I had left behind. I did not hear any more about it until the Waikato Field Day when Mack told me what had happened. Apparently when I drove off I left hundreds of bees behind, these of course attacked the Power Board men who all ended up in the deep drain beside the road trying to escape the bees. Naturally all work came to a halt. Because Mack had hives of bees beside his honey house he got the blame but when he heard that somebody in a big red Ford truck was also involved it did not take him long to work out who the offender really was. Mack suggested I should do as the Australians do and put a large scrim over the hives. As Mack stood head and shoulders above me I deemed it wise to listen carefully to what he said. By next November my wife and I had sewn up a large scrim that went right over the hives and was kept in place by the truck sideboards and tailboard. It does not make good sense to get hives up to good strength and leave a trail of workers behind along the road. These are the workers that should get you a crop of honey or pollinate orchards. Neither does it do the public image of beekeepers any good by stinging innocent people along the road. We now use two long hooks on each truck so the men can drag the hives across the truck deck to the side. We still use a scrim. Just two simple ideas that are still used after forty years!

If you care to look up your May 1956 Beekeeping Journal, on page 20 you will find that at the Matamata Field Day I demonstrated a vibrating uncapping knife. It was in some ways similar to the modern uncapping machine where a comb of honey is passed down through two horizontal vibrating blades. The comb was not fed in by chains, as modern machines are, but simply pushed through by hand. I used it for years but it had one big disadvantage, it would cut the cappings off the comb very satisfactorily but it would also cut your fingers or hand equally as well. There were times when there appeared to be more blood on the extracting room floor than honey. I stopped using the machine for three reasons. Blood everywhere was not hygienic, some of the cuts were painful and I had invested in a modern uncapping machine. The uncapping machine with the blades moving in opposite directions was the breakthrough to a successful machine.

When I first became interested in bees extracted honey was what most beekeepers were interested in. Nowadays it is extracted honey, cut comb honey, pollination, propolis, pollen, royal jelly, package bees, queen bees and packed lines of honey. These all need special techniques and equipment giving beekeepers plenty of scope for their inventiveness.

Some of the weird and wonderful woodworking machines I have made in the past would cause an inspector from the Occupational Safety and Health Department to have some sort of fit, perhaps with some justification. I think the beekeeping industry has progressed a bit. Not many beekeepers would want to give up their low loading truck on 16 inch wheels for one on 20 inch wheels, or go back to the hand uncapping knife from their uncapping machine, or use a hot top wax melter again after using a cappings spinner.

Conference is in Nelson at the Quality Hotel, Rutherford

21st - 24th July 1997

More details next month.

Any queries
Bob or Margaret Lambie
(03) 525 8322 Honey House
(03) 525 8335 Home

Hush of the hives

In the death of his bees, a beekeeper learns the limits of progress

The past few years I've begun to burn my beekeeping equipment. Frames and boxes, varnished with beeswax from years of use, keep the house warm. Other equipment I've stored in the barn. Chickens roost on the lip of the extractor, and last year a hen started sitting in a settling tank. I'd love to start with bees again, but I've become discouraged by all the death. I look at empty hives still standing in my yard and feel the urge to hear again the hum of thousands of bees flying in all directions, to pop open a hive and smell the rich, moist, fecund scent of live bees and honey, but I'm scared.

The fear began for me in 1994. Here in Spokane the year started wonderfully, a hot, wet, spring that produced a waist-deep carpet of blue and purple wildflowers. Hives bubbled with bees.

The bees started dying. At first I blamed the weather — it was dry from mid-June to early September. Then I blamed pesticides. Then urban sprawl. But most of all I blamed myself. I didn't know what I was doing wrong, but it had to be something.

It was strange solace to learn that bees were dying everywhere; solace because this meant the deaths weren't my responsibility; strange because I had to ask what sort of solace there was to be discovered in such loss. A 1996 American Beekeeping Federation survey of last winter's kill reads like the casualty list of a horrific battle: "Maine, 80% loss. . . . Massachusetts, 55-75 percent. . . . Michigan, 60 percent. . . . "

Why? Varroa mites, which cause deformities and paralysis, introduce viruses and ultimately kill entire colonies. The best guess on how the mites got here is that in the 1980's a beekeeper smuggled honey-bee queens from South America or Europe, hoping their offspring would pollinate more effectively and give more honey than American honey-bees. But along with queens, the beekeeper accidentally brought varroa mites. Because bees groom each other constantly, mites spread throughout hives, then clung to bees as they entered other colonies. Since commercial beekeepers often follow blooms across the country, mites soon overspread the continent.

It would be as pointless as it would be easy to blame the die-off on the smuggling beekeeper. The collapse was inevitable anyway. In February the hills surrounding Modesto, California roll with white-blossomed almond trees. Although mono-cropped miles of almond flowers may be beautiful they're as unnatural as Frankenstein's monster, the staggering number of blooms to be pollinated grossly overmatches the capacity of wild pollinators like bumble-bees, moths, wasps and beetles to set fruit, causing almond ranchers to pay distant beekeepers up to $35 per hive to bring in bees for the four-week bloom.

Almonds aren't the only crop needing pollination. Apples, cherries, pears, raspberries, cranberries, blueberries, cucumbers, watermelons — each of these densely packed crops requires similarly densely packed beehives to set fruit.

The strengths that have made modern beekeeping the foundation upon which the agricultural infrastructure rests are precisely the weaknesses that have made beekeeping, and modern agribusiness, vulnerable to something tiny as the mite. These are the intertwined attributes of standardization (the use of one pollinator across many crops), density (the annual gathering of half a million hives to pollinate almonds, for example) and mobility (the transport of bees, and consequently mites, to and from all parts of the country).

Years ago, working with bees provided me a somatic understanding of co-operation: work against bees and they sting; work with them as they work with themselves and the reward you with honey, joy and sore muscles. More recently they taught me about loss. Now, as I watch modern beekeeping collapse under the weight of its own strengths, they're teaching me that the modern industrial economy — based as it is upon these same traits of standardization (the conversion of forests to tree farms, grasslands to cornfields, diverse cultures to capitalism), the short-term maximisation of resource usage and the absolute mobility of resources — faces the same vulnerabilities as beekeeping.

Despite the losses, each year new people discover the richness of this craft, and for them high losses and a widening spiral of chemical treatments may simply be part of the bargain. As for me, this year I wanted a pair of nuthatches try to squeeze into an empty beehive. No matter how they tried, they couldn't make it. With saw and file, I made them a home. They raised babies there, and seemed to like it. So did I.

Acknowledgement NY Times 13-10-96.

Thanks David Penrose

Lawn-wrecker bee invasion has city homeowners abuzz

by Belinda Collis

A placid, but lawn-disfiguring bee is taking the country by storm.

Wellingtonians are waking on summer mornings to find their finely manicured lawns uprooted by the burrowing bees, which leave mounds of soil resembling miniature lunar landscapes.

"We have had a number of calls from people who are concerned about these strange goings on in their gardens," said Hutt City Council environmental officer Peter Clarkson.

The growing number of the Leioproctus group of species around at this time of year is a result of good nesting conditions last year, said Canterbury entymologist Dr Barry Donovan.

He said a decline in the use of insecticides is also having a beneficial effect.

Females of this native species burrow through the earth leaving behind crater-like piles of powdered clay. There may be hundreds of these burrows within a metre radius, but the bee usually returns to her own.

Mixing pollen and nectar, the female creates a "pudding" in which she lays her eggs before closing the burrow entrance so the larva can mature.

The number of bees nesting in one spot ranges from one to many thousands. They will nest wherever the ground is reasonably dry and bare.

Mr Clarkson said the small, dark insects don't pack a fierce sting although he has received calls from a number of worried residents.

"People say they have some kind of little hovering wasp which is ruining their gardens and some have been quite concerned about whether or not they are dangerous," he said.

In fact the bees, which grow to about 13mm in length, are not as aggressive as the bumble and honey bees.

Their only vice is the havoc they wreck on lawns. But Dr Donovan said the insects help to aerate the soil and inflict no damage on vegetation.

The visible mounds they leave behind disappear after rainfall or high wind.

"For people who want to know what to do about the bees, I'd say do nothing," said Dr Donovan.

"In a few weeks the numbers of bees will decrease and they won't be back until the next nesting season."

Acknowledgement Sunday Star Times

Sterilising beekeeping equipment infected with American Foulbrood spores

Dr R.M. Goodwin

We are currently conducting research into methods of sterilising beekeeping equipment that has been in contact with beehives that have American foulbrood disease.

Wax dipping

The first part of the research project will look at paraffin wax dipping.

Dipping hive parts for 10 min in hot paraffin wax is the only method recommended by the Ministry of Agriculture Apicultural Advisors and is the most common method of treating contaminated hive parts. However, both 150°C and 160°C have been recommended and are used in different parts of New Zealand. The actual temperature and time required is however, unknown.

The effectiveness of paraffin wax dipping has never been tested although experience suggests that it is effective in killing *Bacillus larvae* spores. It is also very likely that shorter times and lower temperatures are equally effective while still leaving enough leeway to allow for operator error. Lower temperatures would also have the advantage of making the process safer to use. We will be investigating a range of temperatures and dipping times.

Steam chests

Although not recommended, some beekeepers use steam chests to sterilise hive parts. It is important to determine whether steam chests are effective as they may be a useful alternative to wax dipping. More importantly however, if they are not effective this information needs to be made available to beekeepers who use the system.

Chemical Sterilants

Beekeepers use a wide variety of products to clean and sterilise gloves after finding an AFB hive. These are used to either kill *B. larvae* spores and/or to physically remove them. They include methylated spirits, soaps and a range of disinfectants. As with steam chests, the effectiveness of these are unknown.

Can you help?

We are interested in hearing from beekeepers who use steam chests to sterilise AFB infected equipment, or to melt out wax, and would be interested to have the effectiveness of their steam chest at killing AFB spores measured. If you would like to participate in this trial we will send you test slides and steam sterilisation indicator strips to be placed in your steam chest the next time you use it. We will then test the slides for viable *B. larvae* spores.

We are also interested in hearing from beekeepers who use a solution to sterilise/clean gloves and other hive equipment so that we can test the effectiveness of these solutions.

As always we will keep your names and results in confidence. However, we will wish to publish the results (without beekeepers names) in *'The New Zealand BeeKeeper'* for the benefit of the general beekeeping community.

So if you are interested in taking part in the steam chest trial or having your sterilising solution tested please contact.

Mark Goodwin or Heather Haine
Hort Research,
Ruakura Research Centre,
Private Bag 3123,
Hamilton
Ph: (07) 83-85049
Fax: (07) 838-5085

Hive buzzes with excitement

by Jocelyn Syme

'Buzzing with Excitement' proclaims the sign outside the Honey Hive at Wairakei.

You can tell owner Blair Matheson just loves his honey. 'Bees are Fantastic,' 'Honey is Wonderful' are just a few of the other signs adorning the walls.

The Honey Hive is on the tourist trail and a trip there is a most pleasant and educational experience.

To start with, there are videos on how bees make honey and a real beehive under glass.

Plenty of information is supplied on the different types of honey and of course there's a well stocked tasting table!

Matheson also has a Honey Hive shop at the Lindale tourist complex at Paraparaumu and it's run along similar lines, complete with a real beehive.

He ran a cafe in Taupo before taking over the honey business nearly four years ago from the previous owners, Robin and Dawn Jansen.

Beekeepers throughout New Zealand supply the Honey Hive with different types of honey.

Ten years ago the company was New Zealand's largest honey packer, trading under the name of The Honey Village. Nowadays it's more of a medium-sized honey packer.

Matheson is adamant that he's going to stay in honey packing rather than branching out and keeping his own hives.

"It's so time consuming to keep hives and you just cannot do both beekeeping and honey packing on a large scale," he says.

Trained as a chef, he's always been interested in matching specific honeys to particular foods.

Honey has other health-giving properties which makes it superior to ordinary cane sugar — not to mention its varied tastes.

New Zealanders are so fortunate in having native flowers which produce such distinctive honeys from dark manuka to rewarewa and tawiri, he says.

The Honey Hive also makes a range of "fruit" honeys, using a secret blending technique developed over 25 years.

Relatively bland clover honey is used as the base to which fruit leathers or powders made from fruit puree are added. The fruit makes up about 10 percent of the end product.

"It's a real alternative to jam. We don't need to use any preservatives. Up to 70 percent of the water from nectar evaporates before it is turned into honey, so the honey itself doesn't provide a growth medium for bacteria," Matheson says.

The most popular fruit honeys are loganberry, kiwifruit and apricot. There's plenty of potential for developing new flavours that appeal to Japanese and use fruits that are significant in their culture.

On the drawing board are fruit honeys using plums and cherries.

The Honey Hive is all set to expand and new labels have been designed for their products.

"We're getting into exports in a bigger way. There's a huge market in the United States, for example, where they really love honey.

"However we can't send it to Australia where the beekeepers lobbied strong and hard to keep New Zealand honey out of Australia," Matheson says.

He's also looking at other options and sees enormous potential in using honey in other food products such as ice cream.

It's a taste that's bound to be popular with the biggest honey eaters in the world — New Zealanders, who eat an amazing 2.5kg of honey per person each year.

Return of the Native

Under the long white cloud

Northern Hemisphere Christmas is all about white stuff and it may come as something of a surprise to learn New Zealand's no different. Pohutakawa and rata produce the whitest honey in the world but furry possums with a sweet tooth could see an end to that sort of seasonal treat.

A pot of pearly white native honey makes and ideal gift and it's one to treasure, for the trees it comes from are under threat.

From the earliest times pohutakawa and rata have held a special place in the culture of this country. Ancient Maori tradition says when you die your soul travels to a pohutakawa which reaches out over the ocean in the far north. From here your soul dives through the kelp into the depths and departs on its journey back to the mythical homeland of Hawaiki. Important Maori chiefs were often likened to the grand rata, being known as rata whakatau or sheltering rata, the protector of the people.

Today pohutakawa and rata are known as New Zealand's Christmas trees, covering the coasts and valleys with deep crimson blossom through the months of early summer. For Northerners the first flowers on the pohutakawa are welcomed as the beginning of summer, beach holidays, sunshine and good times. From November to February rata blossom dominates the Southern forests and greets South Islanders as they head off from the towns and cities for summer holidays by their lakes and valleys.

New Zealand's endemic pohutakawa or *metrosideros excelsa*, northern rata or *metrosideros robusta* and southern rata, *metrosideros umbellata* are members of the great iron-hearted myrtle family with relatives in Australia and throughout the Pacific.

Pohutukawa occurs naturally in the upper half of the North Island from a line between New Plymouth and Gisborne, although tree lovers have planted pohutakawa from one end of the country to the other. The trees are usually found tumbling down cliff faces anchored by giant roots clinging to crevices or along the cliffs, with their long tortuous branches reaching to the sea. Many Wellingtonians find it hard to believe these trees don't belong naturally in their city.

Northern rata is one of New Zealand's tallest flowering trees and is well known throughout North Island forests, extending southwards as far as Hokitika. This forest giant needs direct light to germinate and the wind-blown seed often settles and begins life in epiphytes high in the forest's canopy. It casts roots down the host tree which eventually join to form a trunk that may reach as much as three metres in diameter. Northern rata will often outlive the host tree which decays within the rata trunk, leaving a hollow to be used by birds and other forest creatures.

Southern rata is the most widely spread of the three trees, from small trees on Northland outcrops to the sub-Antarctic Auckland islands where it forms the country's southernmost forests. Southern rata is best seen and best loved in the deep valleys of the South Island's West Coast. In the late 1800s Kirk, an early biologist, noted; "There are few more magnificent sights to offer than a mountain-slope covered with this species from its base to nearly 4000 feet when the brilliant scarlet flowers are lighted up by the morning sun."

New Zealanders love them but sadly they're dying. It's a dismaying sight to see cliff faces and headlands of grey, dead pohutakawa skeletons in the north and valleys of grey, dead rata canopy in the south.

Land clearance and fire have taken their toll. But the real threat is the possum. Pohutukawa and rata are like ice-cream to possums. These creatures can destroy mature trees in less than three years.

In simple and shocking terms, pohutakawa and rata cannot survive unless action is taken, and fast.

Project Crimson, a charitable trust, sponsored by Carter Holt Harvey in partnership with the Department of Conservation is taking the steps to combat the possum threat. For five years Project Crimson has been working with community groups to protect and plant pohutakawa in the north. Over 100,000 trees have been produced by such diverse groups as prison inmates, the Auckland CCS nursery, and Royal Forest and Bird Protection Society, for planting on public land and existing pohutakawa stands have been fenced.

And the dreaded possum has been attacked by trapping and poisoning. There has even been a lengthy electric fence built across the Cape Brett Peninsula, with help from the Lottery Grants Board to keep the critters out. This was an ambitious task involving the local iwi, Department of Conservation, Regional Council, Westpac, and local landowners with Carter Holt Harvey and Project Crimson at the helm. It's a wonderful example of what can happen if everyone works together with a common aim.

In September 1996 Project Crimson officially extended its work and took the welcome step of including rata under its umbrella. Already two projects are underway, one looking after rata growing on magnificent limestone outcrops at the Grove in Golden Bay, and the other protecting an isolated stand of southern rata in Omihi, North Canterbury.

But this is just a start. There's a heap of work to be done propagating trees and protecting them from possums for future generations.

And if Project Crimson's work succeeds at present rates Bing Crosby's wish may just come true. May all your Christmases be white. And red. And green.

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Aussie Bee — Australia's first Native Bee Bulletin

Australia has over 2000 species of native bees ranging from tiny insects like mosquitoes to large, furry bumble-bee look-alikes. Many are solitary and raise their young in tiny burrows in the ground or inside twigs. Others are social, with queens, drones and hundreds of workers in large colonies. Australia's social bees are stingless and make delicious aromatic honey. Native bees are important pollinators of Australia's unique wildflowers and are currently being studied as potential pollinators of some exotic crops. Unfortunately until now, no detailed information on these fascinating insects has been available to the general public.

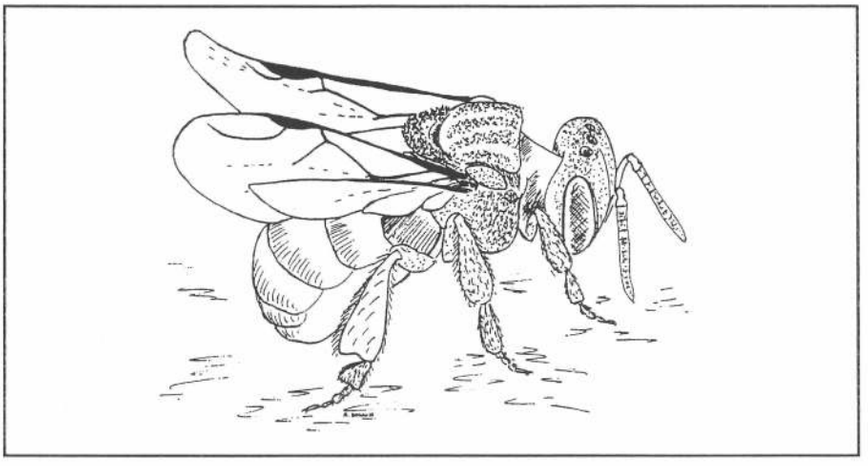
To fill this need the Australian Native Bee Research Centre is launching a quarterly bulletin called *Aussie Bee* and a series of information booklets on native bees. For full details and a free copy of the historic first issue of the bulletin, send a self-addressed, business-sized envelope to the above address.

"The bulletin *Aussie Bee* contains easy-to-read, interesting articles about the species, behaviour and history of Australian native bees," says the editor, Dr Anne Dollin. "Subscribers will also be invited to share their own knowledge and observations about these bees. This is their opportunity to contribute important facts to Australia's knowledge of these little-understood insects."

Dr Anne Dollin, a scientist, has been researching Australian native bees for 17 years. Anne and her husband Les, a skilled bushman, have studied over 500 nests in the most remote areas of Australia. The hope to publicise the latest research findings on native bees and get the help of the Australian public to ensure the survival of these amazing but little-known insects. Australian native bees are cute and colourful insects, vital to the Australian environment and are well worth a closer look!

Dr Anne Dollin
P.O. Box 74 - B4
North Richmond
NSW 2754, Australia

Les and Anne Dollin, co-founders of the Australian Native Bee Research Centre.



Drawing of a stingless Australian social bee, Trigona carbonaria, *based on a scanning electron microscope photograph.*

Getting off to a good start with your customers

T.I.P. 1.

Greet your customers promptly and cheerfully

A study measured the number of seconds people had to wait to be greeted in several businesses. The researchers then asked customers how long they'd been waiting. In every case, the customer's estimate of the time elapsed was higher than the actual time. A customer waiting 30 or 40 seconds often thought three or four minutes had passed. Time drags when you're waiting to be noticed.

A prompt greeting reassures a customer. Remember, the customer is usually on strange turf and is likely to feel somewhat uncomfortable. A quick, friendly greeting relaxes the customer and greases the wheels of smooth service.

Greet customers within 10 seconds of the time they approach your work station. Even if you're busy with another customer or on the phone, pause to say "hello" and let them know that you'll be ready to help them soon.

Acknowledgement
Communication Briefings

Farmers miss out on research work

by Glenys Christian - Farm Editor

The transfer of agricultural research findings to farmers is "largely ineffective," according to Ministry of Agriculture post-election briefing papers. The papers say that passing on such information can lift productivity, and that an interchange of ideas between industry and science is essential in the research process. But with the restructuring of the ministry's former consultancy services into the commercial Agriculture New Zealand, "there is no single body solely responsible for providing this link to end-users."

According to the papers, true information transfer is something which requires a lot of time. But there are constraints on researchers' time because of the public good science fund bidding process they need to go through to obtain money to continue their work. They are also required to referee other researchers' bids and review research carried out by others. The result is that the way in which they transfer information is often restricted to presentations at conferences or industry field days and the publication of articles.

"The transfer of information and technology to industry is currently a requirement of successful public good science fund applications, but is largely ineffective in practice," the papers say. The suggestion is made that a percentage of new funding could be put into a dedicated technology transfer fund.

This could be run by the Foundation for Research, Science and Technology and would allow researchers to employ people specifically to pass on information to farmers. New agricultural industries could then see the benefits of targeted research and development at an early stage.

The ministry says the recent move to evaluate the worth of different research projects by review rather than through adding or performance, not promise, should cut costs. It has concerns about smaller research organisations which might lose skills as they struggle to maintain their share of funding. It says it is possible that some crown research institutes might need to amalgamate to remain viable as developing industries don't have the funds to put into research work.

Public good funding for dairying will increase by more than 30 percent over the next four years because of the high level of supporting funds from the dairy industry, and that for forage crops will remain steady. But with inflation, non-dairy animal, horticulture, arable and food industries funding will decrease by around 10 percent by 2001.

Acknowledgement
New Zealand Herald - 24.1.97.

Continuing fall in wasp population predicted

Wasp numbers are expected to be particularly low this summer.

The prediction comes from Landcare Research and AgResearch scientists who analysed wasp populations in beech forests in the Nelson region.

AgResearch senior scientist Nigel Barlow said the wasp density throughout New Zealand was expected to be lower than last year, continuing a steady decline since 1993.

The figures were for common wasps but the trends were likely to be mimicked elsewhere.

Typically, high wasp numbers in any year were followed by a decline because of competition and fighting between queens during nest building; this year low numbers were anticipated because the spring had been wet and cool.

Landcare wasp control scientist Richard Harris said the accuracy of the prediction would be tested over the next few months as the wasps began building their nests.

But it seemed unlikely wasps anywhere would be as abundant as they were a few years ago.

Earlier this year, a new wasp parasite — sphecoghaga besparum burra — was liberated in Canterbury, Nelson and Waitakere but it could take years before its effectiveness could be judged, Dr Harris said.

Acknowledgement Landcare Research

New Zealand and European Union sign ground-breaking Veterinary Agreement

New Zealand and the European Union (EU) signed recently in Brussels a ground-breaking Veterinary Agreement. The Agreement concerns the sanitary measures affecting the trade in animals and animal products.

"The Agreement is the first of its kind concluded by either New Zealand or the European Union, and is a tribute to the high regard in which each side holds the other's veterinary services," International Trade Minister, Lockwood Smith, said recently.

"The Agreement was concluded under the rules established in the Agreement on the Application of Sanitary and Phyto-Sanitary Measures (SPS) adopted as part of the Uruguay Round," he said.

Dr Smith said the Agreement reflected the importance both sides attached to the SPS. "It creates a sound framework to facilitate trade, while at the same time protecting European and New Zealand's human health and animal health status. It gives both parties the confidence that the high standards set for bilateral trade between them will be maintained while reducing the compliance cost at port of entry and utilising the principles of the SPS Agreement to the benefit of exporters and ultimately the consumer."

The Agreement reflects the SPS principles of "regionalisation" and "equivalence." Regionalisation ensures trade will continue for un-effected parts of New Zealand, or the European Union, even if other areas in the EU or New Zealand were affected by an outbreak of disease.

Application of equivalence meant the different systems in New Zealand and the EU were accepted as equivalent in terms of the outcomes achieved without having to be identical.

"New Zealand's animal and animal product standards are among the highest in the world. This Agreement recognises that and sets a base for communication and co-operation with one of our major trading partners. It is a major breakthrough," Dr Smith said.

Contacts:

Martin Connolly, Office of the Minister of Agriculture, ph: 471-9936

Andrew McKenzie, Ministry of Agriculture, ph: 474-4125

Peter Bennett, Ministry of Foreign Affairs and Trade, ph: 473-2060

Take Note!

Hon Lockwood Smith,
Ministry of Agriculture,
Parliament Buildings, Wellington.

Dear Minister

At a special telephone conference call held for the purpose on the evening of 1 January 1997, the National Executive of the National Beekeepers' Association of New Zealand (Inc) passed the following resolution:

"That the NBA Executive fix the rates of levy for the 1997 year at $60 for each beekeepers' 1st apiary site and $22 for each additional apiary site (refer: Commodity Levies (Bee Products) Order 1996 section 8(2)(a))."

We respectfully ask for you to give our Association written notice that you approve of the fixing as required by section 8(3)(b) of the Order. Further, we would ask that you arrange for a notice to appear in the *Gazette* as required in section 9(b). Our Association will place the information in the next *New Zealand BeeKeeper* magazine, the February issue, to satisfy the requirement in section 9(a).

Yours faithfully,
Nick Wallingford, President

RECIPES

Honey Carrot Cake

1/2 cup shortening
1 cup honey
2 eggs
1/4 cup fresh orange juice
1 tsp vanilla
2 cups finely grated raw carrots, firmly packed
1 cup raisins
2 cups all purpose flour
1 tsp salt
2 tsps baking powder
1 tsp soda
1-1/2 tsps cinnamon
1/2 tsp nutmeg
1/2 tsp ginger

Preheat oven to 350°. In large bowl of electric mixer, cream shortening. Continue creaming while adding honey in a fine stream. Add eggs, one at a time, beating well after each addition. In small bowl, combine orange juice, vanilla, carrots and raisins. Sift together dry ingredients. Add to creamed mixture alternately with carrot mixture, beginning and ending with dry ingredients. Beat after each addition. Turn batter into greased 8 x 12 x 2-inch pan. Bake 35 to 45 minutes or until cake tests done in centre. Let cool in pan 10 minutes. Turn onto wire cake rack. For glaze, spread warm cake with 1/4 cup honey. Cool completely before cutting.

Variations for mini holiday cakes:

Omit 2/3 cup raisins. Add 2/3 cup finely diced candied cherries and pineapple. Spoon batter into well greased 2-inch muffin pan cups. Fill 3/4 full. Bake 18 to 20 minutes or until cakes test done in centre. Let cool in pans 5 minutes. Remove to wire racks to finish cooling. Makes 4 dozen cakes. Frost if desired and garnish with bits of candied cherries.

(From : Honey Recipes from Amana by Amana Society).

Honey Coffee Cake

2 cups sifted all purpose flour
3 tsps baking powder
1/2 tsp salt
1/4 cup sugar
1/4 cup shortening
1 egg
2/3 cup milk

Topping:

3 tbsps soft butter
1/2 cup honey
3/4 cup shredded coconut
3/4 cup cereal flakes

Sift dry ingredients into a bowl. Cut in shortening. Add egg and milk, stirring only until all flour is moistened. Spread batter in greased 9 inch square pan. Cover with topping. Bake at 400° 25 to 30 minutes. Serve warm. *Yield: 9 to 12 servings.*

(From : Honey Recipes from Amana by Amana Society).

Cranberry Honey Bread

3 cups biscuit mix
1/4 tsp salt
1/2 tsp cinnamon
1 cup fresh cranberries, coarsely chopped
1 cup chopped walnuts
1 cup honey
1/2 cup milk
1 egg

In mixing bowl, combine biscuit mix, salt, cinnamon, cranberries and nuts. Mix together honey and milk. Break egg into mixing cup, beat slightly with fork, add to honey and milk. Toss into biscuit mix, stirring only until flour is thoroughly dampened. Turn into well-oiled loaf pan 9 x 5 x 3 inches. Bake at 350° 45 to 50 minutes or until toothpick inserted in centre comes out clean. Loaf bread flavour develops and bread cuts better if cooled and stored 24 hours before using. Makes delicious toast or sandwiches for holiday entertaining.

(From : Honey Recipes from Amana by Amana Society).

Old Fashioned Apple Cake

1 cup dried apples, cooked and mashed
1/2 cup cider
1/2 cup honey
1 cup brown sugar
1/2 cup margarine
1/2 cup buttermilk
3 eggs
2-1/2 cups self-raising flour
1/2 tsp salt
1 tsp baking soda
1 tsp cinnamon
1 tsp nutmeg

Mix well the apples, cider, honey, brown sugar, buttermilk, eggs and margarine. Add the dry ingredients, mixing well. Bake in 350° oven for 30 minutes. Yields: Three 8 inch layers.

Topping:

2 cups caster sugar
1 cup dried apples cooked and mashed
1 tsp nutmeg
1 tsp cinnamon
2 tbsp margarine
1/2-1 cup toasted coconut

Mix ingredients well and spread between layers and on top. Sprinkle with toasted coconut.

(From : Honey Recipes from Amana by Amana Society).

Graham Spice Cake

1/2 cup shortening
1 tsp vanilla
1 cup honey
2 eggs
1/4 cup sifted all purpose flour
1/2 tsp salt
1-1/2 tsps baking powder
1/4 tsp soda
1/4 tsp nutmeg
1/2 tsp cinnamon
1-3/4 cups fine graham cracker crumbs (approx. 22 crackers)
2/3 cup milk

Preheat oven to 350°. In large bowl of electric mixer, cream shortening and vanilla. Continue creaming while adding honey in a fine stream. Add eggs one at a time, beating well after each addition. Sift together flour, salt, baking powder, soda and spices. Mix thoroughly with cracker crumbs. Add to creamed mixture alternately with milk mixture beginning and ending with dry ingredients. Beat after each addition. Pour into greased 8 x 12 x 2 inch pan. Bake 35 to 40 minutes or until done in centre. Cool on wire cake rack 5 minutes. Remove from pan. Complete cooling on rack. Cut in squares. Serve warm with your favourite honey sweetened topping.

(From : Honey Recipes from Amana by Amana Society).

Super Honey Fudge

1 cup honey
1 cup peanut butter
1 cup carob powder
1 cup sesame seeds
1 cup sunflower seeds
1.2 cup dates or other fruits
1/2 cup shredded coconut

Heat honey and peanut butter. Quickly add carob powder and then all seeds, coconut and fruits. Pour into greased 8 x 8 pan and refrigerate to harden. Cut into squares and keep refrigerated if possible. *Yield: 25 squares.* ***(From: Hossier Honey's Cookbook by Indiana Hoosier Honeys).***

IMPORTANT DATES FOR 1997

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

EXECUTIVE MEETINGS

MARCH - 4th and 5th -AUCKLAND
MAY - CONFERENCE CALL
JULY - 21st AT CONFERENCE
SEPTEMBER - 2nd and 3rd - CHRISTCHURCH ? *To be confirmed*
DECEMBER - 2nd and 3rd WELLINGTON ? *To be confirmed*

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

COMING EVENTS...

1997 CALENDAR AUCKLAND BEEKEEPERS CLUB

March 11	7.30 pm	Evening honey show — United Building 23
	7.00 pm	**Entries**
	7.30 pm	Judging — Venue:
April 12	12.30 pm	Apiary requeening Check winter stores
May 10	10.00 am	Working bee
	12.30 pm	Check winter stores

Contact: (09) 838-8567, Jill Dainow.
AUCKLAND BEEKEEPERS CLUB INC.

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

AUCKLAND BRANCH
Branch Meeting
Meet the NBA Executive
The NBA Executive will be in Auckland on Tuesday evening the 4th of March. An invitation has been extended to all who would like to attend.
Time and venue to be advised or Call Jim on (09) 238 7464

NORTH CANTERBURY CLUB
Meet the second Monday of every month March to November inclusive.
Contact Don Edwards
Phone: (03) 327-5409

SOUTH CANTERBURY BRANCH
Phone Noel (03) 693-9771

CANTERBURY BRANCH
Canterbury Meeting
25th of February at 7.30pm
Merryvale Rugby Club
Phone: Brian (03) 318-0732

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

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

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

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

NELSON BEEKEEPERS CLUB
Extracting Honey
Peter and Kevin will demonstrate spinning the honey out using a manual extractor.
Demonstration only, so don't bring along your honey boxes.
Where: Industrial Therapy Unit at Ngawhatu
When: Tuesday 18th Feb. at 7.00pm.
Discussion - Club Facilities
What communal facilities should the club invest in?
A paraffin wax dipper seems a good investment that would be widely used. Any other proposals. Come and have your say.
Also, we will have a guest speaker, **Mr Norm Donovan**, a beekeeper from Nova Scotia who will give a presentation with slides on Brother Adam.
When: Wednesday 12th March at 7.30pm
Where: Staff Training , Ngawhatu. 200 metres down from the Industrial Therapy Unit, opposite the Chapel.
Phone: (03) 546-1422

OTAGO BRANCH
Phone Bill (03) 485-9268

POVERTY BAY BRANCH
Barry Foster (06) 867-4591

SOUTHERN NORTH ISLAND BRANCH
Phone: Frank 478-3367

SOUTHLAND FIELD DAY
Contact Don Stedman, Invercargil
Ph/Fax 218 6182
for a programme.

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

WAIKATO BRANCH
Call Tony (07) 856-9625

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

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

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