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Wishing you all a very Merry Christmas and Prosperous New Year from the team at The New Zealand BeeKeeper.

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The New Zealand BeeKeeper is published eleven times per annum; February to December. All copy should be with the Editor by the 1st day of the month of publication except for December when copy should be received by 20th November.

Notes from the Executive

Having started my second term on the executive I find it is just as stormy as the first term. I sit and wonder why I am keeping BEES or being on the executive! When I first started beekeeping I enjoyed the challenge until 18 months ago. Now I ask myself. "What is important in life?" Being on the executive has given me a bigger insight into the higher politics of the industry, and I wonder where it will end and who the casualties will be. Will it be the beekeeper who makes his living out of bees I wonder?

Over the past years we have had huge changes in the industry with the Commodity Levy and Pest Management Strategy. We also have a very successful marketing group and our marketing facilitator has introduced some very good ideas and is developing innovations which have come from different members of the beekeeping fraternity. Following the conference some branches which submitted remits have been asked to follow the remits through and bring the results back to the executive. One such is Canterbury's on the apiary rating system; to see if it can be improved. I think it can. Southland's remit 11, (to form a committee to formulate a national code of practice) I believe would be good for the beekeeping industry. Southland, I wish you well when your branch works on this.

We have made some changes in the magazine over the past year. Some, which I don't like, have been forced on to us - like rules for letters to the editor. We do have Mr B Paterson to thank for this, or do we? At Conference I was asked to look into the cost saving if we decreased the magazine by five issues per year. After going through everything and working out the relevant costs and income, I found we would only save between nine to 12,000 dollars, not as much as people had thought. The magazine as part of our industry covers a wide spectrum: From marketing reports, letters to the editor, (there has been only one letter to the editor not printed in the last four years) to articles covering a wide area of the industry in general. It would be good to print the perfect magazine one year but I can't see that happening as we all have our opinions on how and what should be printed in it.

I wish all readers, beekeepers and suppliers of equipment to the industry A VERY MERRY CHRISTMAS and A HONEY of A NEW YEAR.

AR Taiaroa

Busy little bees!

A visit to Levin North Primary School from Levin apiarist Rob Johnson provided an exciting beginning for the students' study about bees.

Their study was designed to combine science and social studies providing the children with an insight into the living world and an example of the way people make a living in the community.

In his demonstration Mr Johnson showed the children a living cross section of a hive, complete with queen-bee. The students were taught that the queen-bee can lay over two hundred eggs a day and can live up to seven years and the drone only lives for a few months due to the social elimination process bees have.

Mr Johnson is pictured giving Dylan Renner a close-up look at the hive, which allowed the children to see how the honeycombs were made.

Acknowledgement, Levin Chronicle

NBA Office hours during the holiday season

The Office will be closed 25th and 26th of December.

Your phone call will be transferred to me during this period.

Or our Home number is (06) 843-8930, Fax (06) 843-3281.

Janice and I would like to take this opportunity to say thank you to all the people who have encouraged us over the last twelve months.

We enormously enjoy the work we are contracted for, and wish you all a very happy festive season and sincerely hope 1999 will be a good year for you all.

Harry and Janice Brown, Executive secretary

To all NBA Members

The President and Executive would like to say thank you for your input over the last year and trust 1999 will be a very successful year for you and your families. May your honey boxes overflow.

Russell Berry, President

The New Zealand **BeeKeeper**

THIS ISSUE

Letters to the Editor

Letters are invited on the understanding that they must include the writer's full name and address. Nom-de-plumes or initials will not be accepted for printing. Letters should be no more than 200 words, if longer they will be abbreviated. Letters not for publication should be marked NOT FOR PUBLICATION. Opinions expressed in the magazine are those of the writer.

Dear Sir

Hello from Northwestern Pennsylvania, USA. I am a 54 year old beekeeper that is trying to find his way through this wonderful creation by the use of modern technology. I am self-taught so if things don't come out just right please forgive me I will repent and try to do better. A quote borrowed from a dear Mormon friend of mine.

I guess as openers, I have a couple of questions.

1. Do you know if there is any information on wintering honey-bees in an artificial environment? By this I'm wondering if a person could use a heated building and feed back extract honey and allow them to make comb honey.

2. Do you know how a piece of beekeeping equipment might be patented? I have a piece of beekeeping equipment that every beekeeper around the world could use if they have one colony or hundreds of colonies. There I have struck my tentacle into the pool of electronic information.

Thank you for being a good listener!

I love people and bees, write soon.

Winter is coming and deer season doesn't last long.

Sincerely yours

Walter H Myers
23072 Cannon Hollow Rd
Seagertown Pa 16433 USA.

Dear Sir

Why can't Nick Wallingford give all his bellyaching a rest. Why not let the current executive get on with their unpaid time and effort they put in for the rest of us, without the unnecessary extra cost that consulting with lawyers requires.

I would like to know what is driving this man, his ego? Other people's ego's? Also can he state what exactly are the private agendas the current President should be putting aside? I'm sure a lot of members would like to know.

Yours faithfully

Gerard Martin

Dear Sir

I would like to express my thanks to the many members of our Association who have supported our Secretary and Executive over the past year. To those few members whose support we do not appear to have, I request they stop for the good of the Industry, making unnecessary demands of Executive and allow us to proceed with the matters we were elected to implement.

Executive members give their time freely for the good of the Industry and welcome constructive comments. Unfortunately some of the information on E-mail and in the *New Zealand BeeKeeper*, under Letters to the Editor, are neither correct nor constructive.

We are doing our best for the Industry and we thank all those who have assisted us.

We wish you all a Merry Christmas and a Happy and Prosperous New Year.

Russell Berry, NBA President

Hawke's Bay Diseaseathon

Before the day the organisers had selected the areas and the beekeepers where disease could be expected. The listed apiaries were then grouped for convenience of the teams.

On November 7 over 50 members turned out to be briefed by James Driscoll on what was expected. Changes from earlier inspections were that no inspectors' warrants were available as we were in the throes of change, each apiary was to have a composite sample of 600 bees put into a plastic jar for testing and from one hive of each apiary. Three three-day old larvae were to be placed in those little tubes with the funny name. They look like a ballpoint cap with a clipped lid. Along with this was the accompanying paper work. Someone was heard to remark - 'that by the time we had collected the samples and done the writing there would be no time to look for disease'. Most people don't like new ideas!

Fortunately the weather was fine, but not unbearably hot when the 12 teams with an experienced leader set off to pull the hives apart. A good tip for those hives that almost require the spade to prize the boxes apart is to tip them over on their side. If they are still stubborn a piece of frame wire with a couple of handles can be used like a cheese wire. Probably by the time you do get the boxes apart you will find that the frames are too frail to be moved. Another neglected hive!

If you were lucky you had a short run and were back at Robinson Apiaries in time to get one of the first sausages off the barbecue or to sample the goodies the ladies had prepared. One group was so keen that they didn't get back until 5pm, but some food and some liquid refreshment had been saved for them.

For those who like statistics - 12 teams inspected 48 apiaries with 352 hives. One hive was confirmed AFB and samples from three others were sent for testing.

Our thanks go to Robinson Apiaries, Chris and Laine, to all the beekeepers both commercial and hobbyists, who gave up their Saturday to help in the fight to eliminate AFB and to make beekeeping in New Zealand better for all.

Ron Morison

Marketing

In this month's Beekeeper.....

- **A very important *value for money* questionnaire for levy-payers.**
- **Honey marketers beware: keep to the facts and the law!**
- **NZ Honey Research Unit's Peter Molan helps Aussies write a new book: *Robin Stewart's Chemical Free Home*.**
- **Producing promotional material for brands in the marketplace.**
- **A Luddite confesses to being impressed.**
- **A Chef's secret that could transform your honey-cooking!**
- **A million dollars worth of information for only $48 including GST!**
- **And my honey of the month... fair pouring into the frames this season says Russell Berry!**

A very important *value for money* questionnaire for levy-payers.

In this month's *BeeKeeper* there's a questionnaire we'd like levy-payers to complete: it's about how do we measure what we're doing with the Marketing Budget.... and who we're doing *it* for! Please spend some time going through the form and let us have your thoughts... the Marketing Committee itself represents a good cross-section of the industry... but on some issues it's good to ask the membership at large on their opinion and ideas... your thoughts will be tabled at the special Strategic Planning meeting held early next year.

Bill Floyd

Honey marketers beware: keep to the facts and the law!

Some months ago I reminded honey marketers that they should be very careful about making claims for their honey that contravened Food Labelling or Therapeutic Goods legislation. That still applies... especially as the Honey Research Unit is currently undertaking the first formal clinical trials for honey wound healing in New Zealand. Those trials, and other current research, could produce exceptional publicity early next year... but they are trials and they are not a licence for brands to make claims on their own packaging!

The bottom-line is: if you make a claim or a promise on your own products and you get it wrong and you are taken to task by the regulatory authorities... or by a consumer disadvantaged or hurt by you or your advice... then you cannot expect support from the Honey Research Unit! It's as simple as that! We can't help you if you take the initiative to do something that's against the law! Don't try to be what you aren't... it's becoming an increasingly litigious society... and you won't be able to hide behind us. Unless you have the knowledge and resources

and ability to know what you are marketing... and the implications of what you are saying or promising... don't!

NZ Honey Research Unit's Peter Molan helps Aussies write a new book: *Robin Stewart's Chemical Free Home*, and more.....

Honey features in this life-style book about how to have a healthy home: the authors thank Peter Molan for the considerable information he gave them about honey's role in a healthy family... and I was talking with the USA's National Honey Board last month about research work in the States. They've commissioned a scientist to work on honey concepts, putting together information that will be passed onto Peter. When told she would be supplying information to Peter the scientist said she was honoured... "he's a world authority!"

Peter combines a unique balance of innovative and commercially attuned lateral thinking with sound authoritative investigative techniques... that may seem strong but... fair go!... he's a delight to work with! And that's a very good article by Peter in this month's *BeeKeeper*.

Producing promotional material for brands in the marketplace.

The response to our questionnaire on promotional material was not great... 36 in all out of over 1200 readers. Mixed opinion... some totally opposed... a few agreeing to it being a fundraiser for the NBA... most for supplying some material but at cost only: but the suggested volumes people could or would order themselves would make any of the ideas hugely unworkable!.

That number of replies didn't give any sort of statistical mandate for any of the opinions: and the Marketing Committee has agreed that a final decision can't be made until its Strategic Planning Meeting... but the most likely course of action is that we shouldn't be trying to distort the efforts and investments of the packers and brands in the marketplace by providing subsidised material... it just makes it easier for price-discounters to enter the marketplace. (They're welcome in... but at their own cost!)

A Luddite confesses to being impressed.

For those who don't know, events at the South Canterbury Branch's Field day were being viewed by beekeepers throughout NZ within hours of the event. Peter Bray who with his new digital camera confirmed his technophilic preoccupation... (that's okay Peter... just a forlorn last swing from an envious technophobe)... may have some uses after all. Peter photographed the events on his special camera, emailed them through his own computer to Nick Wallingford and Nick then put the photos out on his website for anyone in NZ and the world to see just a few hours later. Ummmm.... I think it's time for me to get my teenage son to teach me a bit me about computers! (Good thing he's home from varsity for a few months.) That's pretty impressive stuff Peter and Nick!

A Chef's secret that could transform your honey-cooking!

November's chef honey class was very successful... and I also learned an invaluable cooking tip from one of the chef tutors there, Bill Bryce.

Bill Bryce and I were tasting one of the student's lamb dish sauces, and Bill described it as a 'do-nut'... in other words... the flavours were lacking something 'in the middle' ...they weren't quite right! And Bill told the student that if she was using a reasonable amount of honey in a savoury sauce application "you have to beef up the seasonings (salt and pepper) to balance the sweetness and keep it savoury." The rationale is that the sweetness is so prevalent that if you don't compensate with more salt and pepper it doesn't seem 'complete'... and so a pinch of both later... and the difference was amazing! So there you are... just in time for the special honey sauce-glaze you were making for the Christmas turkey.

A million dollars worth of information for only $48 including GST!

The NZ Honey Advisory Service now has a complete portfolio of all the research carried out by the USA's National Honey Board. This research focuses on the use of honey in food technology applications. A wealth of information... and a spiral bound (plain cover) photocopy is yours for just $48 including GST... send us a cheque and an address and we'll send to you. (Sorry... but it's a cash up-front deal.)

Everything from how to make Honey Coated French Fries (true!) to Bannock (a fat-free Canadian bread with dried cranberries and pecans). All recipes and information is written for commercial applications; it's okay for, but not really, a domestic manual. (Information and amounts quite technical.)

And my honey of the month... fair pouring into the frames this season says Russell Berry!

We got a supply of Rewarewa down from the North Island for last month's chef honey class. What a delicious honey that is! It'll never replace my favourite honey on toasted crumpet... Canterbury clover... (sorry rest of NZ but I was born and bred a Cantabrian and that jaundiced parochial programming stays with you for life...). But Rewarewa does have a deliciously chewy spice-and-floral "marmaladey" flavour that is great with warm fresh bread at lunchtime.,. and I always use it in oriental stir-fry dishes.

And Russell Berry (last month's *BeeKeeper* editorial) says this could be the best Rewarewa crop in years... good thing too: because the manuka crop is looking very light!

And that's all for now... and for this year!

Sandee and I wish you all good health and good cheer... we know it's a **very** busy time for beekeepers but try and take some time out somewhere to enjoy the companionship of family and friends. (We'd say "take time out to smell the flowers"... but for some of you that would immediately have you reverting to work mode as you tried to assess the nectar flow in the bloom!)

And a Best Wishes from the Marketing Committee too (Jane Lorimer; Peter Bray; Harry Brown; Graham Cammell; Phillip Cropp; Steve Olds; and Tony Taiaroa.)

Regards

Bill Floyd, Marketing Committee

Bee Dance

The sun in the Antipodes
is shining on the honey-bees
and on the rhododendron flowers
where bumble-bees and Silver Eyes
take nectar in the sunny hours.
Here they take their petalled ease,
the plum trees and the honey-bees;
aloud they hum, they hum so loud
the sun may send a bee light cloud.
And should a bee light cloud turn grey
and cold drive honey-bees away,
they wait until their sunny hive
redances to those almond flowers
that whiten in the easy hours
of Silver Eyes and bumble-bees,
and nectar in the Antipodes.

Poet: Mark Collet, Lake Okareka

Notes for the hobbyist

Frank Lindsay

Thank heavens the flow is now on. The bees are fanning at the entrance and a hum pervades the still evening air. All the work with feeding and swarm prevention has now payed off and now the bees are flat out bringing in nectar. All you have to do is add supers and trust we have enough rain and settled weather to keep things flowering.

What is astonishing is how quickly a strong hive will fill supers with honey once the flow starts - 1 to 3 in ten days under good conditions.

Bees have different characteristics when it comes to storing honey. Some are called "down" superers and some are "up" superers. Down supers tend to pack the honey around the brood nest and are reluctant to venture up into the honey supers. Quite often it is necessary to encourage them up by putting a frame of uncapped honey into the new honey super, especially if you use queen excluders. In fact once there is a super of honey above the brood nest, an excluder is not really necessary as the honey forms a barrier and restricts the queen's laying area.

Up superers on the other hand tend to move all the honey up and continue to rear brood in the two bottom boxes. Queen excluders are not a barrier to honey storage and the bees continue to work with them on. Most beekeepers prefer this type of bee as all you do is continue to place empty honey supers on top as each one is filled, (add another super when the top super is half full of bees, don't wait until they are full of honey).

There are also different methods of supering. Commercial beekeepers as just mentioned place honey supers on top as it is less labour intensive. A few "under" super by lifting off the existing honey supers and placing new foundation frames immediately above the brood nest (in the third box). This is an awful lot of extra work, however you do get beautifully drawn frames with cells from top to bottom bar. These frames are stronger, don't have holes or gaps for the queen to hide in when you are looking for her or places to build queen cells when they are used in the brood chamber.

How many honey supers you should have depends on your operation and the surrounding area. If you are reliant on borrowing or hiring an extractor, it is better to have four honey supers. These are put on as required (or all at once) and removed and extracted at the end of the season.

Some commercial beekeepers only have two honey supers per hive. These are removed when capped, extracted and them put back on to be filled again. This means that honey types are kept separate. An advantage when selling bulk honey.

One problem for the hobbyist beekeeper is that the flow often coincides with Christmas holidays. Off they go without a thought of the bees and come home to find the hive full of honey and swarmed. If you are going away, put on plenty of supers and arrange for a local beekeeper to keep an eye on them. If there is a problem, it can be quickly dealt with and neighbours are not inconvenienced.

Removing honey

Once frames are capped, they can be removed as required or they can be all removed in one operation as the flow is wanning. Whatever is easiest for the beekeeper.

There are many ways of removing the bees from supers: shaking, brushing, blowing, fume boards, and escape boards. I recommend for urban areas that beekeepers use escape boards. They are a lot of extra work but in the end, they create less disturbance.

A day or two before you are ready to remove your honey, inspect the hive for disease. This means that you take the hive apart and check all the brood frames for AFB (formally referred to as Bacillus Larvae, now renamed Paenibacillus Larvae). Quick inspections of just a few frames is not really affective for picking up early signs of infection.

Place hive lid on the ground in front of the hive, stack all the supers on to this until only the bottom super is on the base board and cover the supers to prevent robbing (hive mat or a cloth). Remove the outside frame and place against the entrance. Quickly remove each frame and look for the first brood frame. Give the frame a gentle shake to remove the field bees then look at the capped brood area for cells that have a small hole in the capping, is concave or off-coloured. Flick off the capping and look at the pupa below, white and everything is right. Anything else could be chalk brood, sac brood, chilled (unlikely), half moon disorder or killed as a result of earlier flooding. Chocolate brown and continues to rope with a match stick indicates BL, (leave the match in the cell, close immediately and consult another beekeeper or your local Apiary Advisory Officer).

Although most will never see this problem, they should get into the habit of checking hives thoroughly, reassembling the brood nest as you go.

When you get to the honey supers you wish to remove, (for those who don't use excluders - put any frames with patches of brood back down below the escape board (bees won't leave brood). Place the escape board on (hole side up) and note the position of the escapes. Clean off any burr comb along the bottom bars in the honey super which coincide with these so the bees have free access to the escape. Don't leave any broken wax on the frames as this will clog the escapes and defeat the purpose of the exercise. (Put the burr comb scrapings below the escape board so the bees can clean it up).

Put on the super(s) and replace the lid. Make sure the super(s) are bee tight otherwise your neighbours bees will rob out your honey. (Tape up holes or large cracks). Leave for 24 hours then remove the super(s) and start extracting straight away while the honey is still warm, in a clean bee proof environment. Put down plenty of newspaper to catch the drips as you will only be allowed to use the kitchen once if you make a mess.

A brilliant suggestion in one of the American magazines recently was to

hold an extracting party. Three of four of you together sharing the jobs and doing each others honey in turn. Certainly makes a long tiresome job quicker and enjoyable.

After you have finished, its important to put the wet supers back on the hive in the evening (after dark) so that you don't get excited bees looking for a nonexistent honey flow.

Tips:
If you have excited bees everywhere annoying the neighbours because something has gone wrong, put a sprinkler on top of the hive and turn on the water. At the same time place a bit of wet grass across the entrance. The bees will soon calm and stop flying. This will even temporarily stop a swarm coming out if you catch it in time.

Overheard at the Canterbury field day.

The brood nest is the engine of the hive so should contain your best frames and boxes.

Have quiet bees as they are easy to handle and produce just as much honey. Those with nasty bees tend to take short cuts when working their hives to avoid being stung.

Work for the month:
Check feed, swarm control, check for failing queens (the best time to replace a queen is during the flow), introduce nucs, weed control, fit foundation into comb honey frames, super hives, prepare the honey house equipment, first honey extraction in some areas, BL check before removing honey.

Any questions or subjects you would like discussed can be forwarded to the editor or Email to lindsays.apiaries@xtra.co.nz

Asset Protection and Management

Electronic ID provides a permanent and foolproof method of protecting and managing your property.

The technology comprises two parts:

* a microchip (12 x 2mm) each with its own unique unalterable number, and
* a Reader - which emits a radio frequency signal, and which doesn't need line of sight to read the number.

The microchip can therefore be placed within an object within an object (eg a box of a hive) and read from 'outside' the hive, details related to the number of the microchip can be held on a database, thereby facilitating (per means of an RS232 port on the Reader) all relevant information related to that particular hive being readily accessible.

As the microchip is entirely passive, it's life is infinite: accordingly, they can be used, recovered and re-used.

A reflectorised NOTICE is often used to indicate that (hives) on the property have been permanently identified with a microchip.

Media publicity at the time this technology is applied is not difficult to arrange, and word soon gets around...!

Overseas experience suggests that the deterrent factor related to property which has been microchipped is more significant than the recovery factor, although both are important.

Attracting bees by spraying crop with sugar syrup

Mark Goodwin, Heather Haine, Hort. Research, Ruakura

We are occasionally asked whether it is worthwhile spraying fruit trees with sugar syrup to attract honeybees and improve pollination. This method used to be popular in home gardens in the 1940 - 50s.

Two trials conducted more than 40 years ago reported that spraying sugar syrup on plum[1] and pear[2] trees increased the number of honeybees visiting trees. The trial on pear trees also measured pollination and reported a 16% increase in fruit set[2]. However, other trials conducted about the same time did not produce the same results. Researchers reported decreases in the number of bees visiting pear[3], apple and bean[4] flowers after spraying them with sugar solutions. However, they did note an increase in the number-of bees collecting syrup from the petals and branches. The trial on apples also measured pollination but could not detect any effect due to the sugar syrup[4]. The reason for these apparently contradictory results is unknown.

Despite the negative results reported, the increases in bee numbers and the increase in pollination reported suggests that spraying sugar solutions onto flowers may be a useful way of increasing bee visitation. The failures, however, indicate that the method may be unreliable. The reported failures may explain why the method has attracted little attention over the last 30 years. However, if the technique can be developed to produce reliable results it would have wide application, since it appears to have immediate effects and could be easily used by growers.

The aim of this investigation was to determine whether applying sugar syrup directly to flowers could increase bee visitation. Also investigated was whether the size of the response to sugar syrup spraying was related to the concentration of the syrup applied.

Nashi Trial

The first trial was carried out in a commercial nashi pear orchard. Ten randomly selected trees were sprayed to run off with 33% sugar syrup between 0915h and 0930h, while another 10 trees were left unsprayed (control trees). The bees visiting flowers, branches and leaves of each tree were counted every 30 minutes for the remainder of the day and between 0900h and 1500h on the following day. Bees feeding from the nectaries or collecting pollen from flowers were recorded as visiting the flowers. Bees feeding off sugar syrup on the petals, leaves or branches were recorded as feeding on leaves or branches.

Spraying nashi trees with sugar syrup significantly increased the number of honeybees visiting nashi flowers. There were 22 times more bees visiting flowers on the sprayed trees than on the unsprayed trees at 1100h and 12 times as many over the whole day (Fig. 1). It also caused large numbers of bees to visit leaves, branches and petals to collect sugar syrup. The number of bees visiting flowers increased for three hours after the sugar was applied and decreased for the remainder of the day. There was a lag of 30 minutes between the increase in the number of bees visiting flowers and those visiting leaves and branches on the first day. There were still significantly more bees visiting flower on the second day (Fig 2) although the difference between sprayed and unsprayed trees was not as large.

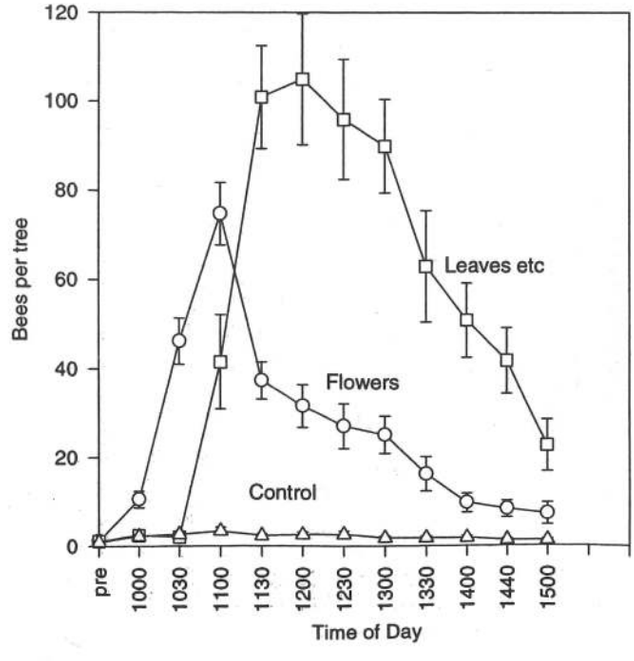

Fig 1. Average number of bees per tree visiting flowers (flowers), leaves or branches (leaves etc.) on sprayed trees or visiting flowers on unsprayed trees (control) on the day the treatment was applied (0900h). The vertical lines are standard error bars.

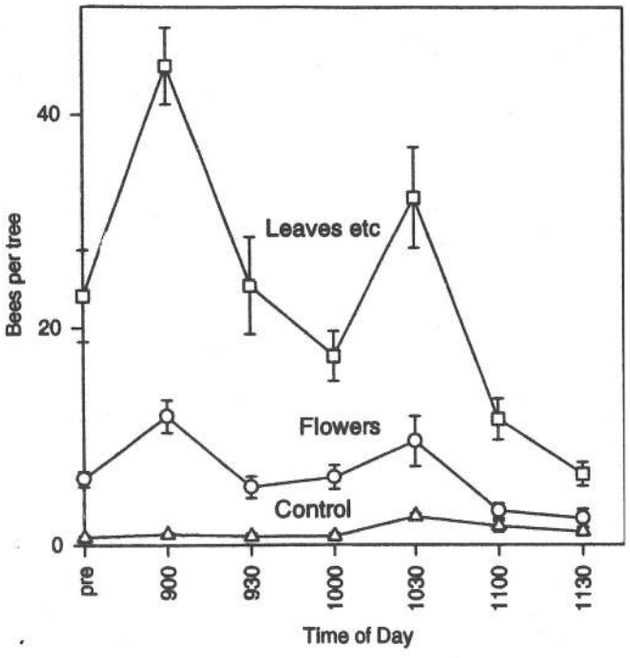

Fig 2. Average number of bees per tree visiting flowers (flowers), leaves or branches (leaves etc.) on sprayed or visiting flowers on unsprayed trees (control) on the day after the treatment was applied. The vertical lines are standard error bars.

Apple trial

A second trial was carried out in a commercial apple orchard. Eleven apple trees were randomly selected and sprayed with one of a range of sugar concentrations (0, 15, 20, 25, 30, 35, 40, 45, 50, SS or 60%). The syrup was sprayed between 111Sh and 1130h and the bees counted every 30 minutes between 1130h to 1530h. Only bees feeding (tongue in the nectary or collecting pollen) on the apple flowers were counted. The numbers of bees visiting flowers increased with increasing sugar concentrations (Fig 3).

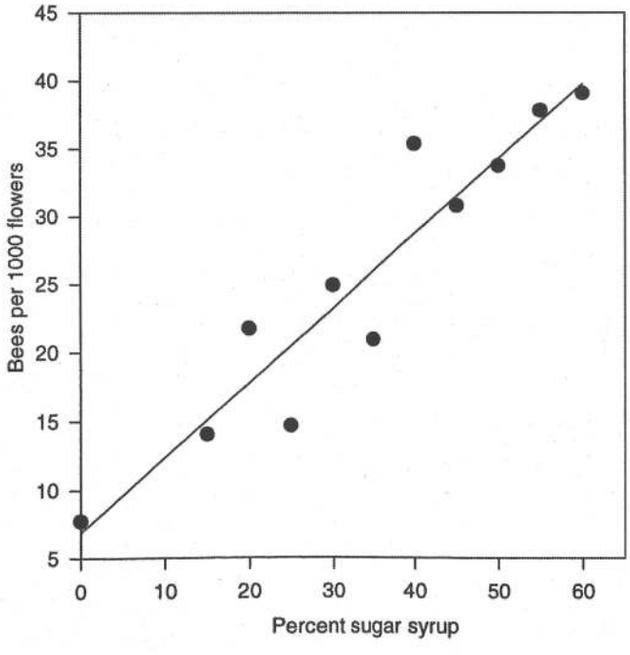

Fig 3. Relationship between the number of bees visiting apple flowers and the concentration of sugar syrup applied.

Discussion

Spraying syrup on nashi trees caused large numbers of bees to visit leaves and branches as has been reported previously. This may explain the decline in bees visiting flowers recorded in earlier studies. In the two trials reported in this study there were enough bees in the area to increase bee visitation to both flowers, and leaves and branches, because of the small number of trees involved. If larger numbers of trees were sprayed and hive densities in the area were low, it is conceivable that there may not have been enough bees to result in an increase in the number of bees visiting flowers as well as those visiting leaves and branches. In which case an increase in bees visiting leaves to collect syrup may have been at the expense of bees visiting flowers. This could explain why some of the earlier trials reported a decrease in the number of bees visiting flowers. The size of the increase in bees visiting flowers appears to be dependent on the concentration of the syrup applied. The size of the increases were larger than those reported for synthetic bee attractants.

This study does, however, leave several issues not addressed:

Robbing. Although robbing was not observed in this trial, applying large amounts of sugar syrup could cause robbing problems.

Disease problems. The presence of sugar syrup on leaves and branches may increase plant disease problems such as sooty mold. However, if there were enough bees in the orchard, the sugar syrup may not stay on the flowers for long enough to cause a problem.

Phytotoxicity. There is the potential for phytotoxic effects on plants if high concentrations of sugar syrup are used, although, as with disease problems the syrup would probably be removed before it causes a problem.

Pollination. Although increased bee visitation to flowers should result in increased pollination, this needs to be verified. It is possible that even though the syrup caused more bees to visit flowers it may have not increased the movement of bees between flowers or trees.

Even with the questions that still need to be answered, and the possible detrimental side effects, the effect of applying sugar syrup to crops is dramatic enough to warrant further research effort to answer some of these questions.

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Book Review - Producing Royal Jelly by RF Van Toor

Every time I read a book I learn something and this book is no exception. Although only 86 pages, it is easy to read and understand, contains up-to-date information and tips.

The book takes you through the theory behind RJ, its possible uses, apiary set up, step-by-step production methods right through to its storage ready for sale. It has a good index, clear photograph throughout, plus a section on diseases.

Royal Jelly is not something you just decide to do, it takes planning and time to set up and a covered yard. Check out marketing opportunities and work out your cost of production before you start.

Basically, the commercial set up uses thirty production hives with another thirty for back up production of brood and bees and a number of nucs to obtain grafting larvae or use a transfer system. Work is rostered around a two days on, one day off routine which looked easy to achieve if you are totally dedicated to RJ production. However, it also provides information for a hobbyist to produce RJ for ones own consumption.

Personally, I have not produced Royal Jelly but have some experience with queen cell production which is similar.

I'm not sure whether hives used for continuous production could then be used to obtain a honey crop. My hives tend to collapse after intensive queen cell production.

There are a few minor suggestions I could make to improve this book for its second reprint. One would be the addition of a time line. (IE trap pollen, select hives and set up - control nosema, stimulate hives and build up reserves, then follow the easy steps for RJ production).

Another would be a system for production grafting larvae but this might interfere with the two on, one off system.

An excellent book, well worth buying whether for RJ production or just as a reference book. Oh and if you were wondering, yes I have it on good authority that RJ does put zest into you life especially when used straight from the hive, so watch out.

Frank Lindsay

Handy Hints

Torching hives

This is of course a purely hypothetical situation, but if say for instance you happened to be delivering a load of hives out of the orchards into a back country summer site and found that to your surprise and consternation that there where say 24 hives sitting in the site that according to your records had been shifted out. How would you go about seeing how many, if any, were still alive after all this time, that is of course allowing for the fact that it is the middle of the night and not only are you short of time, but its also very dark and very cold and you don't want to lift the lids.

Easy, assuming of course that such an unlikely event could actually happen to somebody, you just get down on your knees shine your torch in the front of the hive and look up through the entrance and you can see the bees hanging there. Actually at this stage in the article we could probably go the whole hog and add realism to the article by supposing that even after all this time 21 out of 24 hives were still alive, on the other hand that probably seems a bit far fetched, but it has been a very warm spring in this purely hypothetical area.

I suppose another handy hint would be to fill in your bee book as you shift the hives rather than doing it a few days later from memory.

Peter Berry (possibly and if it is him this article is drawn 100% from his imagination.)

Seasons Greetings

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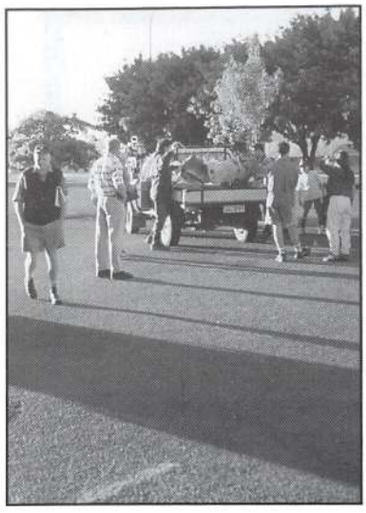
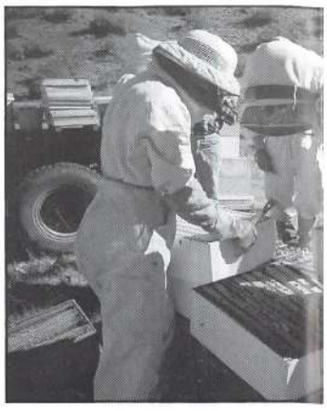
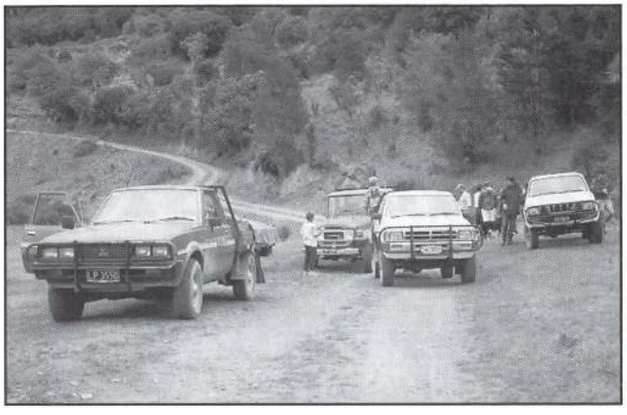


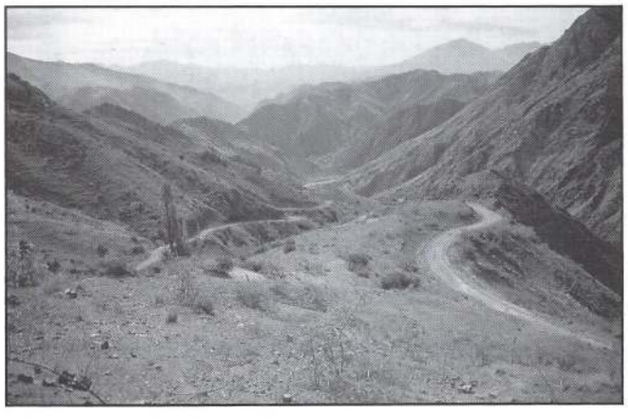


A weekend in the High Count



On 21 March 1998 at 7am, 16 adults, three children and two dogs gathered, then travelled down the East Coast of the South Island to Kekerengu, where, at the home of Mark and Pam Milne and son Daniel, gear, people and dogs piled into five, 4WD vehicles and travelled inland from Kekerengu heading for the Muzzle Station, home of John and Tina Nimmo.

Fifteen minutes of travel from the main road, the tarseal ended and we're in to the gravel. Three quarters of an hour and we stop at the last house before the Muzzle to say hello to a mother and two small children. The same house was where Mark and Pam Milne had lived 26 years ago with their first two children. As a passenger in the front truck driven by Mark, I was delighted by his fund of stories and knowledge about the area we were driving through; valleys and over the hills, through creeks and river beds.

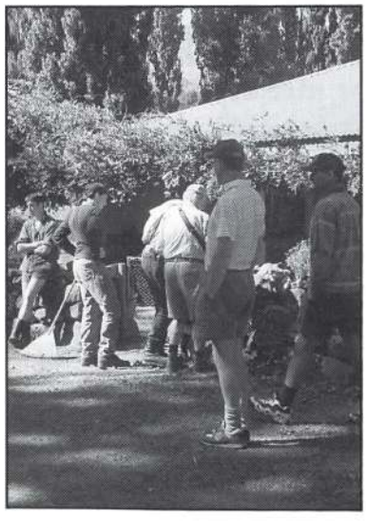


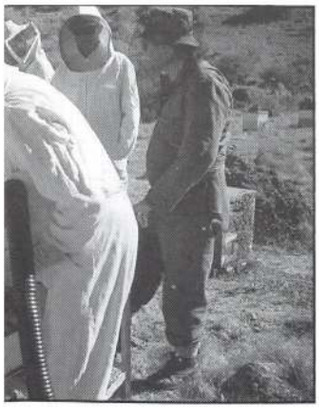
Two hours later our second stop beside a clear water stream, a drink, a snack, but mostly to stretch those legs, especially if you'd been sitting in the middle. It was also a time to capture on film some of the faces and surroundings of great patterned cliffs. The wild Briar Rose, Matagourie and Borage was plentiful as we journeyed along the tops, always with an eagle eye for those choice apiary sites. Two more hours of bumping along we stopped for lunch and another stretch - 40 winks! - overlooking a large number of beehives.

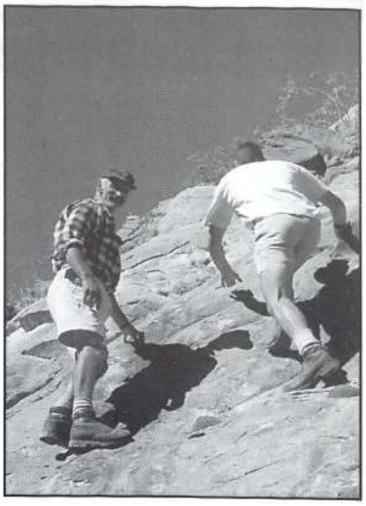
The beekeepers who had the right gear, assisted in the removal of honey boxes from 46 hives on two different sites. Mark and son Daniel blowing the bees, inspecting the brood without the aid of gloves, was an enviable sight to some! The rest of us stacked the honey boxes onto the truck - a fair load! A Canterbury beekeeper who just happened to be there, too encouraged a couple of helpers to wash sticky hands in the nearest bucket, which turned out to be sugar syrup! so an even stickier pair, muttering murder, had a wee walk to the nearest creek.

Another hour of travel - thereabouts - laden with honey boxes, to the Muzzle and their modern honey house of polystyrene sandwich construction. Large, with modern extraction plant and equipment. No warming room as the honey is light and easy to extract, powered by means of a diesel generator.

Colin and Tina Nimmo made us all very welcome and after a barbecue tea outside, invited us into their modern mud block and wood home for coffee, and a few stories were told.







'y for Marlborough beekeepers

The old homestead, a whitewashed mud building built in 1860, made a very comfortable sleeping place for most of us, kept warm with a blazing wood stove which also provided plenty of hot water.

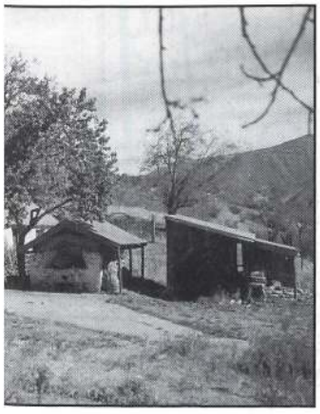
Next morning we were all shown the extractor plant at work, extracting the honey - then the separation of the honey from the wax cappings (no thick honeys).

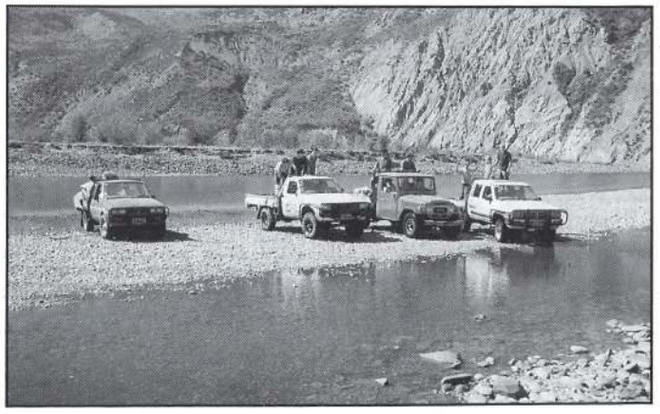
Mark Milne was staying on to deal with the honey, but decided to travel with us as far as the Clarence River crossing in his unimog truck (just in case).

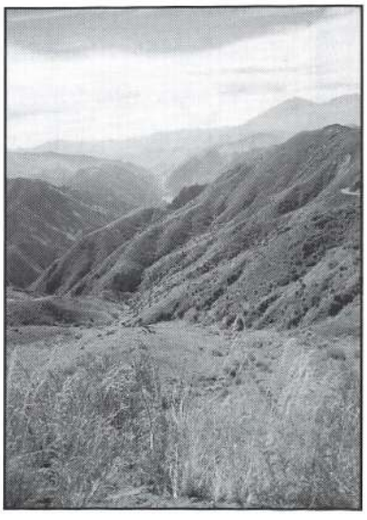
With thanks and goodbyes said to the Nimmos, and one truck less to travel in (some on the backs), our trip to Kaikoura - via the Clarence River Reserve began. At the river crossing Will Trollope in his petrol 4WD with a few on the back was the first, (just in case). Good driving or good navigation - whatever, got them safely across and the three other vehicles followed - all safe. Mark in his unimog returned to the Muzzle and all the honey still to be done.

The Canterbury beekeeper in (old Smokey) showered everyone in black smoke and stones as he led the way up the bank and on to the road alongside the mighty Clarence. Lake Hayes is its source, at the back of the St James Station up in the High Country, so it flows a fair distance to reach the sea. We travelled for quite a way alongside the river and into Godfrey Beeking Territory until we get to the old Quail Flat Station. We had a good look around at the old mud buildings, the bread oven, the old woolshed - remnants of a bye-gone era, during our lunch break, then back on the road. We leave the Clarence and travel a few miles up another river bed (no water), through all sorts of rock formations, then wound our way up-up-up to 4000ft, shrouded in cold moving mist. Stop, to cover chilled bones with coats. One beekeeper was not very impressed, first with the cold on the way back, then the drop way down, sometimes both sides - as they travelled the steep descent to the bottom, through a locked gate and onto the inland road to Kaikoura where refuelling and warming up with that great Kiwi fare - the Hot Meat Pie, was the order of the day.

Back at the Milne Homestead near Kekerengu, we piled thankfully into our own vehicles with great stories to tell and memories for a long time of a great weekend. Thanks to the Nimmo and Milne families from the Marlborough Beekeepers.







Establishing honey as a respectable medicine

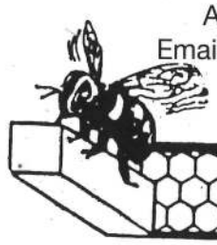
PC Molan, Associate Professor of Biochemistry and Co-director of the Honey Research Unit, University of Waikato

Correspondence to the Editor of the *New Zealand BeeKeeper* in the past has been critical of research being carried out on honey because it is perceived that there is no need to do any more research as it has all been done already. The recent articles on the subject of the Chinese burn ointment being promoted by Patricia Holborow serves as a good illustration of why this perception is wrong. 'mei bao', or 'moist burn ointment' or 'moist ointment' as it is also known, is a honey-containing herbal preparation that has had a high profile for the spectacular results that have been claimed for it. It thus may be thought by some to need no further research. But there are some important points that are often overlooked. One is that for the protection of the consumer the regulatory authorities in developed countries require proper evidence before therapeutic effects can be claimed for a product - anecdotal evidence, like that for the effectiveness of 'moist burn ointment', is not enough. Another is that the evidence of therapeutic effect is matched against a comparative standard to see how effective the product is. The New Zealand Commerce Act 1987 provides for prosecutions against fraudulent advertisers. It places the onus on those who offer herbal remedies, homoeopathic and other products of doubtful efficacy to demonstrate in a court of law scientific facts to support their claims[1]. The legislative requirements in New Zealand for treating animals are even stricter - it is illegal to administer to an animal for therapeutic purposes any substance that is not a Licensed Animal Remedy. The Animal Remedies Board requires a similar standard of evidence of effectiveness as that required by the Ministry of Health.

The report in the Evening Standard that Graeham Gaisford's application to the Ministry of Health to have the ointment registered as a medicine in New Zealand was turned down because the evidence was unsatisfactory serves as a good illustration of the requirement for sound evidence. There may be some who would think that there is prejudice against herbal remedies involved, but the results of several clinical trials and trials on laboratory animals that been carried out on this ointment, published in the past few years, illustrate the soundness of this decision of the Ministry of Health in protecting the New Zealand consumer.

Results of a trial carried out on rats[2] showed that obvious infection occurred after the use of 'moist burn ointment' on burn wounds and healing was delayed, there was no improvement in the immune response, and scarring and deformity appeared after healing. In another trial on rats the burn wounds were infected with Pseudomonas aeruginosa[3] and comparison made between "moist burn ointment" or commonly used modern burn creams. It was found that more than 70% of the animals in the "moist burn ointment" group had invasive wound infection, and the 50% got septicemia. Testing on agar plates showed that, unlike the modern burn creams, "moist burn ointment" did not show an antibacterial effect.

In a trial to compare the therapeutic value of 'moist burn ointment' and betadine ointment in severe burns[4], with 30 patients divided into two groups, the results showed the difference between two groups was not great in superficial second-degree burn wounds, but 'moist burn ointment' was less effective than betadine in deep burn wounds. 'Moist burn ointment' had little antibacterial effect, wound healing was delayed, and incidences of infection, complication and fatality were higher. 'Moist burn ointment' did not have a noticeable



effect in inhibiting scarring. In another trial[5], on patients suffering from middle and large sized burns, 42.3% who were treated with moist ointment developed septicemia, compared with 17.2% who were managed with the normal method. The conclusion of the researchers was that the moist ointment does not do well on third-degree burns because of the ensuing rampant infection. In a trial carried out on 115 patients suffering from deep second-degree burns[6], the patients were randomly divided into four groups, and treated with "moist burn ointment" or three commonly used modern burn treatments. The results showed that "moist ointment" group was significantly inferior to other groups in respects of healing of wound surface, antibacterial property, cost of treatment and formation of scarring. The researchers suggested that the use of 'moist ointment' in the treatment of deep second-degree burn wounds should be prohibited.

There have also been some adverse clinical reports on cases where 'moist burn ointment' has been used to treat burns. One reported a total of 23 patients with moderate or minor burns who had been treated with 'moist burn ointment' before admission to hospital[7]. All the wounds were severely infected except one with scar deformity, 17 cases were complicated by toxic symptoms, and seven cases were accompanied with septicemia. Three died within 48 hours after admission. Scar deformity resulted in 15 cases. Another reported on 21 burned children who had been treated with "moist burn ointment" before being transferred to the hospital after the occurrence of invasive infection and multiple systemic complications[8]. Four of the 21 patients died. It was concluded that the severe infection of burn wounds that had resulted from the application of "moist burn ointment" was the main factor causing multiple organ damage, and that "moist burn ointment" should be used with great caution.

These research findings reported for "moist burn ointment" contrast sharply with the results reported for clinical trials conducted on the treatment of burns with pure honey. The results of randomised controlled trials, published in peer-reviewed international medical journals, provide convincing evidence that pure honey is better than the methods of treatment that are widely used in modern hospitals[9-12]. In these trials the superior antibacterial activity of the honey could be clearly seen. This antibacterial activity is vitally important in obtaining rapid healing in burn wounds as in any other type of wound or skin ulcer, as the colonisation of wounds by bacteria prevents repair of the damaged tissue. If the growth of bacteria is not kept under control this leads to invasion of the blood by the bacteria, giving septicaemia which is life-threatening. (The fatalities that result from severe burns almost always result from infection of the burn wounds.)

But these clinical trials on burn wounds are the only properly conducted clinical trials that have been carried out on the use of honey as a wound dressing. For acceptance of honey as a legitimate therapeutic option for other types of wounds or for skin ulcers there is a need for further trials to be conducted to demonstrate that it is better than, or at least as good as, the dressings that are used in modern medical practice to treat these types of wounds. In order to get medical practitioners interested in conducting such trials it is necessary to provide evidence of there being a rational basis for the therapy. The natural remedies for which there are anecdotal claims for good therapeutic effects are multitude, but the medical view is that it is unreasonable to conduct trials on any of these for which there is no rational basis for their therapeutic effect[13].

The aim of the research projects being carried out at the Honey Research Unit at the University of Waikato is to establish a rational basis for the use of honey in medical and veterinary therapies. Although it has been known since 1919 that honey has antibacterial activity, it is necessary to demonstrate that for each type of infection to be treated the causative bacteria are sensitive to honey at concentrations that could realistically be achieved when honey is used therapeutically. So far we

have done this for the bacterial species which cause stomach ulcers, infect wounds, cause mastitis in cows, and cause diarrhoea. We are currently working on testing honey against the bacterial species that cause sore throats, and cause pink eye in sheep and cows. Shortly we will be starting work on the bacterial species involved in dental health. We are also investigating the components of honey which are responsible for the anti-inflammatory action of honey seen when it is used as a dressing on wounds and burns, and the stimulation of tissue regeneration.

Where we have successfully established a rational basis for using honey we have been able to get medical practitioners and veterinarians interested in conducting clinical trials. We are at the planning stage of, or have just commenced, trials using honey to treat scours in calves, mastitis in cows, and leg ulcers on humans. A major part of our research work has been identifying honeys with high levels of antibacterial activity, as it is important that if a trial is conducted the honey used should have the best chance of success. In the medical literature there are various degrees of effectiveness reported for honey clearing infection in wounds. Some personal communications from various medical practitioners who have tried using selected honey with high levels of antibacterial activity have indicated the importance of having a high level of antibacterial activity in the honey used - there have been in several cases a marked difference in the rate of healing when changing from a honey with a lower level of activity.

Also the Honey Research Unit has been conducting exhaustive literature research, and is monitoring all new publications in the professional scientific and medical literature, to be in a position to be able to present all of the evidence of effectiveness that exists for the use of honey as a therapeutic agent. This is considered to be of value to the honey industry for two reasons. One is that the information can be made available to medical practitioners and to the general public, to increase interest in using honey medically and thus creating another market for it. The other is that the information will be needed for the purpose of registering honey as a medicine with the Ministry of Health. Currently this is a requirement for any therapeutic claims to be made for a product, but proposed legislation will make it mandatory for all natural remedies sold.

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From the Colonies

Canterbury Field Day 98

Saturday, 21 November 1998 brought together months of planning by the Canterbury Branch. What started out as a good idea early in the year was about to happen.

With the money we made from the Christchurch Honey Expo we paid for a guest speaker from Australia and with the best memories of an evening meeting we had at MAF Border Control Headquarters we had our theme for the Field Day.

Geoff Bongard, our President welcomed about 80 beekeepers and 20 other family members.

A good display of equipment from Ecroyd's Beekeeping Supplies and Beeline Supplies gave people interesting items to browse at. The venue, Allenton Rugby Clubrooms, Ashburton were very well utilised.

Our first speaker for the day was John Burton, MAF Quality Management Quarantine Service (Border Control). He gave us an overview of New Zealand's present position and what was an acceptable level of surveillance. He showed us how his staff were ambassadors for New Zealand and how they had to make judgement calls on who to inspect while keeping up a friendly appearance.

Our second speaker was Trevor Weatherhead, Australian MAF, Apiary Officer, responsible for taking control of exotic incursions in Australia who gave a very good overview on how the Australian government and beekeeping body respond and what programmes they have in place to deal with it. He spoke of his work in Darwin and the Torres Strait regions. More details of his talk are available on the beekeeping page on the internet. www@beekeeping.co.nz

A BBQ lunch was enjoyed by all, especially the marinated steak sponsored by Stuart Ecroyd. After lunch Geoff Bongard took those interested in queen raising to his site, a short walk from the venue. Those remaining at the clubrooms had the opportunity to talk with Trevor Weatherhead and Executive members (Lin McKenzie and Don Bell).

Everyone was back at the clubrooms at 3pm. Those wanting to hear about DECA and AFB control went with Richard Bensemann to another part of the building while the rest of us heard more from Trevor Weatherhead on other bee varieties. The Field Day finished about 4pm.

I left about 6.30pm and there was still a lot of talking going on. We had members from North Island, Blenheim, West Coast and the deep South. No one was in a hurry to leave. Thanks to the committee members and others who helped make the day an outstanding success.

Trevor Corbett, Secretary Canterbury Branch

99 Field Day - Saturday, 20 February Glass Brothers, Waikaka Valley

9.00am	Registrations open ($5 per person)
9.30am	Morning Tea, Introductions
9.50am	Welcome and Administration, Carne Clisshold
10.00am	Bill Floyd, NZ Honey Food & Ingredient Advisory Service
12.00pm	Introducing our Sponsors
12.15pm	Speaker's Corner... bring a three minute tape and get it off your chest
12.30pm	Lunch - bring your own, tea and coffee supplied
1.30pm	Forum: Panel Discussion. Expectations when buying or selling honey
2.00pm	Pollination - the Canterbury experience
2.30pm	Successes and failures - Evaluation of systems and equipment - Pollen traps, propolis boards,.....
Later	Another cuppa, discussion,..... Three minute tapes..... Demonstration: Shifting hives
Even later	Barbecue time, weather permitting, bring food and drink

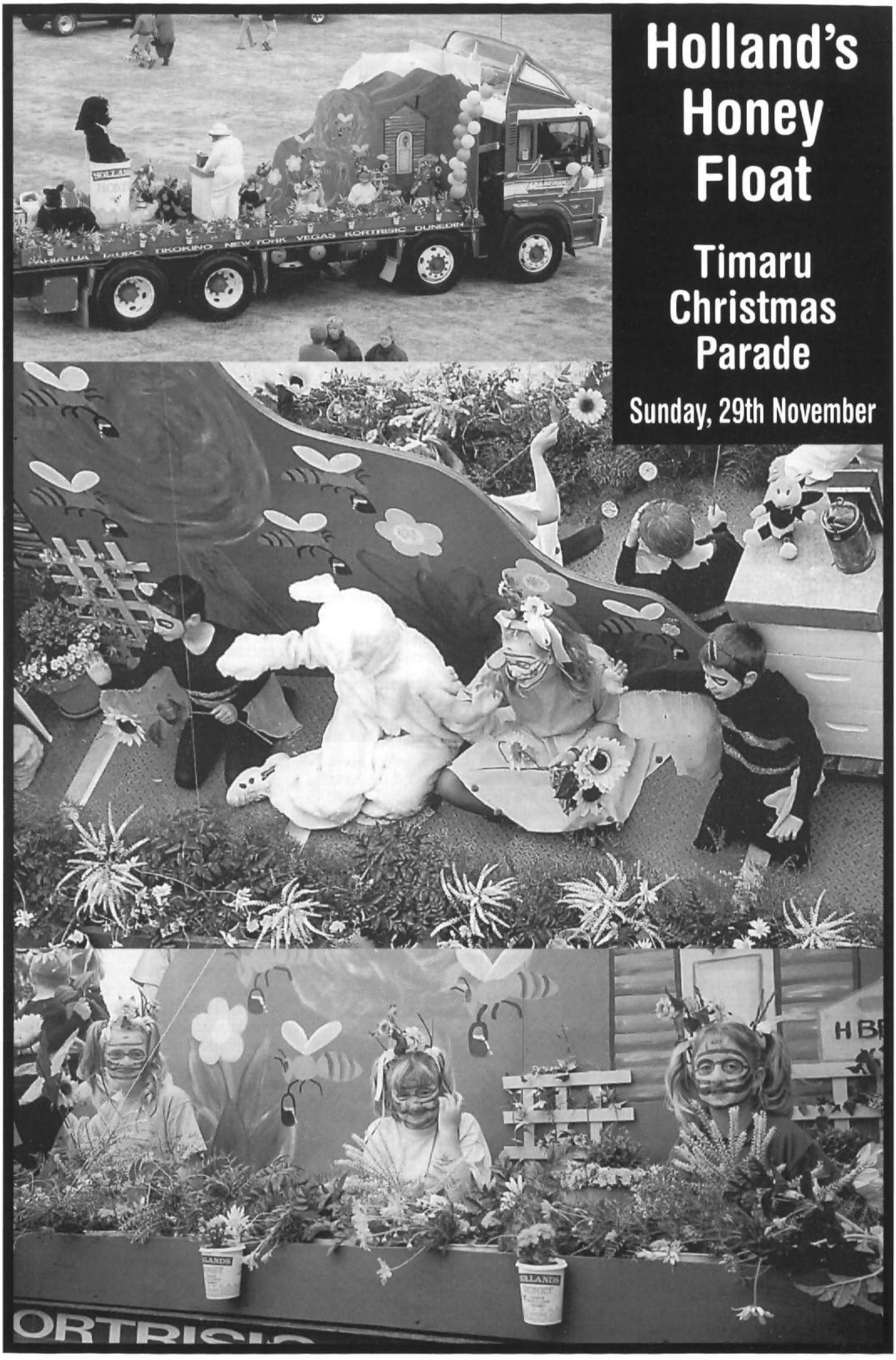
Brian from **Beeline** and **Stuart Ecroyd** will be present with displays of their respective products.

Bring ideas, questions, problems for discussion.

Bring your veil, weather permitting there will be a practical session for those interested.

Glass Brothers' Honey House is on the Waikaka Valley Road, turn left at the windmill when coming from State Highway 1. The turnoff is 4km from Gore.

Questions - contact Don Stedman on (03) 246-9777.


Holland's
Honey
Float
Timaru
Christmas
Parade
Sunday, 29th November
TAUPO TIROKINO NEW YORK VEGAS KORTRIJSIC DUNEDIN

Beekeepers police industrial disease

Hawke's Bay beekeepers are self-policing their industry to keep their hives disease free.

At this time each year, teams of local beekeepers, working with a Ministry of Agriculture and Forestry apiary inspector, search the region for diseased hives.

The three significant diseases of honey bee brood found in New Zealand are American foulbrood (AFB), sacbrood and chalkbrood.

AFB is the worst and beekeepers want to see it totally eradicated.

No bee disease is known to harm humans or make honey unfit for eating.

During the 1880s AFB became rampant in New Zealand.

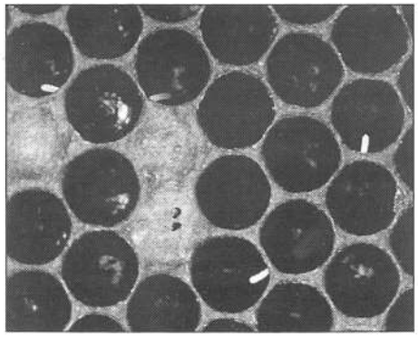
For the rest of the nineteenth century and the early years of the twentieth, beekeeping declined as AFB increased.

This was because of the prevalence of box hives and beekeeper's ignorance of disease control methods.

Beekeeper Peter Berry said in a way AFB is the main unifying force for the whole industry.

"It's the main force that drives most of the legislation involving bees and has had a huge impact on the industry over the years.

Back around the turn of the century, AFB was running at incredibly high rates but the national average now is probably less than one hive in 100.



American foulbrood infection - dark and punctured cappings.

We run at a rate of one hive in 1000 and have been doing that for years."

Mr Berry said AFB has been bad in Hawke's Bay but because of regular self-policing and good housekeeping it is controlled.

He said in reality AFB is spread by beekeepers moving gear from one hive to another.

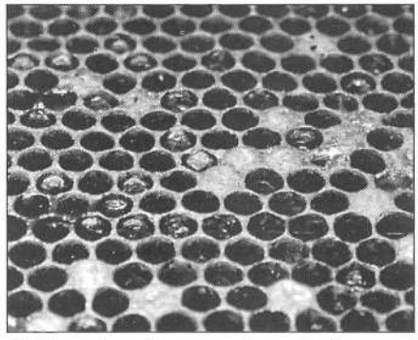
"If you take two boxes containing 16 frames of honey off an infected hive you have 18 different bits of equipment that go back on to 18 different hives with the potential to introduce 18 new cases.

The truth is if you do it you will get it."

The disease, caused by a spore-forming bacteria Bacillus larvae, affects only the brood.

The bees don't die but the brood doesn't hatch - the hive gets weaker and weaker and eventually dies out.

If there is honey in the hive there is the risk of it being robbed out by other bees



AFB scales; Dry remains of diseased brood.

and AFB spreading to other colonies.

Diseased hives must be located and destroyed.

To recognise a diseased brood beekeepers need to be familiar with the appearance of a healthy brood in all stages.

Healthy larvae have a glistening, pearly-white appearance and distinctive body segments.

They lie coiled in a C-shape at the bottom of the cell for four days after hatching and then lie stretched out along the length of the cell.

In a healthy colony headed by a young queen the pattern of capped brood in the comb is pretty regular.

Where AFB is present there will be scattered patches of capped brood surrounded by cells that either are empty or have unsealed brood in them.

Disease has prevented some bees from developing and emerging.

Cappings over healthy brood are usually convex or domed while cappings over a cell containing a larva or pupa that has died from AFB are either sunken or concave.

They may become oily looking or darker in colour.

Nurse bees often begin to remove the caps from cells containing diseased brood.

This results in a fairly small hole with jagged edges in the cappings.

This should not be confused with colonies which fail to complete many cappings resulting in a smooth round hole in the centre of the capping.

Although honey-bee larvae become infected with AFB at a very early stage they do not die until either just before or just after the cell is sealed - at the late larval or early pupal stage.

Infected larvae or pupae slump down to the lower side of the cell, losing signs of body segmentation and changing colour from off-white through yellow to light brown.

About a month after death the larvae form an almost black scale which sticks tightly to the lower wall of the cell.

This scale is rarely removed by the bees and is useful in making a diagnosis.

Diseased brood initially has a watery consistency, no different from that of a healthy brood.

As the larvae or pupae decay further and become brown in colour, the remains are ropy in texture.

Diseased brood draws out as a smooth chocolate brown thread about 10-30 millimetres long.

This symptom is characteristic of diseased brood at this stage.

When the disease is advanced, a characteristic foul, fishy smell may be noticeable.

Colonies and hives infected with AFB must be destroyed by burning.

Approval may be given by MAF to salvage hive woodware in good condition but frames, bees, honey and old appliances must be burnt.

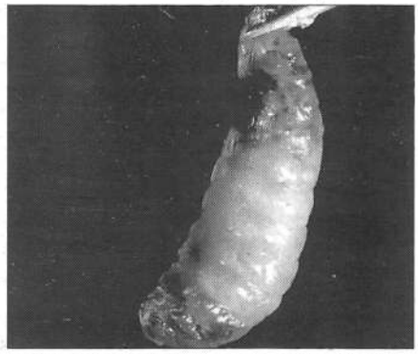
Sacbrood virus (SBV) is not usually serious but beekeepers must be familiar with its symptoms as they are frequently confused with those of AFB and the two diseases can occur together.

Chalkbrood is caused by the fungus Ascosphaera apis and rarely kills a colony.

However, heavy populations will reduce the worker population significantly.

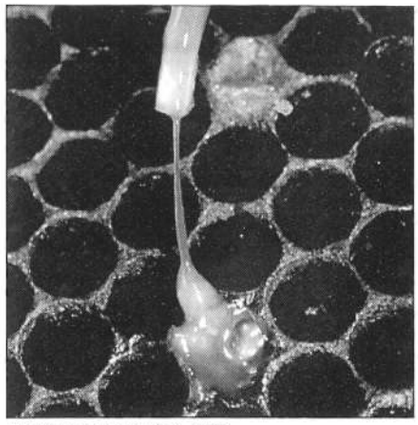
There are six overseas pests or diseases which New Zealand doesn't have that could threaten the industry.

They are European foulbrood, a bacterial disease which kills honey-bee larvae, varoa mite an external parasite of the common honey-bee, Asian mite, also an external parasite, tracheal mite, which lives inside the respiratory system of



Larva infected with sacbrood, showing prominent segmentation, darkened head and blister of fluid at tail.

adult bees, Africanised honey-bee, known for its aggressive nature and bee louse, a small wingless fly which lives on adult bees.



Ropiness test for AFB.

The first five are serious problems and while bee louse wouldn't have much effect within New Zealand, its presence could cause problems for the bee export trade.

Mr Berry said inspection days achieve two goals - getting a lot of hives inspected for AFB and educating beekeepers on what to look for while inspecting their own and other hives.

Laws relating to beekeeping have changed and beekeepers must now become registered and be licensed to inspect their own and other hives.

If a registered and licensed hive owner doesn't follow the strategy laid down by law, the licence can be removed.

Hives must be inspected by someone who is licensed at a cost to the owner.

Mr Berry said the laws are more draconian but with more research being done total eradication of AFB is a possibility.

He said that during hive inspections for AFB, beekeepers are now required to submit bee samples which are tested for EFB and mites.

"EFB is not here but it is in Australia and as a general rule it doesn't take long for anything to jump across the ditch.

"EFB is a disease that becomes indemic right through the bee populations and a resistant strain of bee has to be bred up.

Mr Berry said there's no way the disease can be dealt with without feeding drugs.

"New Zealand is one of the few countries that doesn't use drugs to control bee diseases and we want to keep it that way.

"We are putting a strategy in place so that when EFB arrives here we will be able to control it without the use of drugs."

"We should have had a strategy in place years ago, but dealing with the government is like dealing with a worm and trying to decide which end you are talking to."

Mr Berry said inspecting hives can be time consuming but important for the industry.

"I might lose a morning's work but it's cheap insurance and worth my while to protect my business."

Acknowledgement, Hawke's Bay Herald-Tribune

Scrum Down

Recently I saw something interesting.

Going through a nucleus I came across a ball of bees enthusiastically packed into a very tight bunch.

Not unusual as often a stray virgin can be seen being given a real hiding when it accidently enters the wrong nuc.

What was unusual this time was that there was no queen inside the ball and there was the colony's queen on the outside of the ball enthusiastically working away like an All Black forward hooking from the outside of the scrum trying to get to an invisible ball.

Perhaps it started off with a stray bee carrying the smell of a strange queen.

Gary

Gratitude to Hawke's Bay orchardists

Beekeepers are pleased with the effort made by orchardists to protect bees from spray poisoning.

Industry spokesman Ian Berry said some losses are expected, but this year was exceptional and bee losses were minimal.

"The growers certainly did a good job and made a real effort to protect the bees."

"Trees flowered earlier than normal and growers are moving away from carbryl-based thinning sprays which are toxic to bees."

Acknowledgement, Hawke's Bay Herald-Tribune

RECIPES

Marinated Butterflied Leg of Lamb

1 leg of lamb, boned and butterflied
1 cup cider vinegar
1 cup cooking oil
1 tsp salt
½ tsp coarsely ground pepper
2 tsps dry mustard
1 cup honey
1 large onion, sliced and separated into rings

Place lamb in glass, crockery or enamel dish. Combine vinegar, oil, salt, pepper and mustard in 1-quart mixing bowl. Mix very well. Add honey and mix until well blended. Arrange onion slices over lamb. Pour marinade evenly over lamb and onions. Refrigerate for 24 hours, turning occasionally. Let lamb stand at room temperature for 1 hour before barbecuing. Grill over hot bed of coals for about 1 hour and 30 mins or to desired doneness, basting occasionally with the marinade. Remove lamb from direct heat if dark crust is not desired. Place marinated onion slices in foil pouch, place on grill for 15 mins before completion of cooking time for lamb. *Yield: 8 servings.*

Carrots with Honey and Mint

2 lbs fresh carrots
½ tsp salt
¾ cup honey
juice of 1 lemon
3 tsps butter
3 tsps flour
1 oz cream de menthe
½ tsp dried mint leaf flakes

Wash, peel and cut carrots into ¼-inch slices. Place in saucepan with enough water to cover. Boil for 10 minutes or until nearly tender. Add salt, honey and lemon juice to the carrots. Simmer for 20 minutes. Brown butter in small skillet and mix with flour to make dark roux. Add carrots and blend well over low heat until thickened. Pour into shallow casserole. Drizzle top with cream de menthe. Glaze under broiler and top with sprinkling of mint flakes. *Yield: 6-8 servings.*

Sweet Potato Spoon Bread

4-5 kumera, grated
rind of 1 lemon
rind of ½ orange
4 eggs, beaten
1½ cups honey
¾ cup oil
½ tsp nutmeg
½ tsp cinnamon

Mix first 3 ingredients well. Beat the eggs until frothy. Continue beating adding honey in a fine stream. Add oil slowly beating until smooth. Add grated mixture to egg mixture. Add nutmeg and cinnamon, mix well. Pour into oiled baking dish. Bake at 325°F for 1 hour. Serve hot or cold with ham or chicken.

Baked Onions

4 large onions, cut into halves
¼ cup butter, melted
½ cup honey
½ cup tomato juice
1½ tsps soy sauce
½ tsp salt
¼ tsp pepper

Place onions in casserole. Combine remaining ingredients for sauce, pour over onions. Cover tightly with aluminium foil. Bake at 350°F for 1 hour, basting frequently. *Yield: 6-8 servings.*

Honey Doughnuts

2 tbsps shortening
1 cup honey
1 egg well beaten
2 tsps baking powder
1 tsp salt
1 cup milk
flour

Cream shortening. Continue creaming while adding honey in a fine stream. Add egg, baking powder, salt and milk, mix well. Add enough flour to roll out dough and cut easily. Fry in deep hot fat. The honey will keep these delicious doughnuts moist longer than usual.

Sweet Roasted Pork

1 5lb pork loin roast
1 1lb 4oz jar apricot preserves
⅓ cup honey
¼ cup lemon juice
¼ cup soy sauce
½ clove of garlic, minced
1 small onion, minced
1 cup ginger ale
⅛ tsp pepper (opt)
1 1lb 13oz can whole apricots
1 tsp grated lemon rind
1¼ cup grated coconut
parsley sprigs

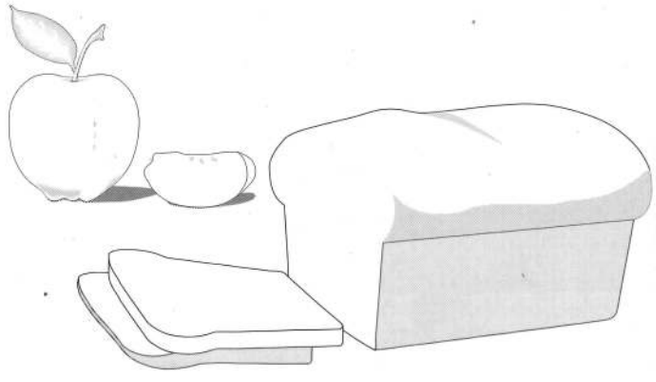
Remove bone from roast and tie roast with string. Place in a dish. Combine half the apricot preserves with honey, lemon juice, garlic, onion, ginger ale, ginger and pepper and pour over roast. Marinate for 4-5 hours, turning occasionally. Remove roast from marinade and reserve marinade. Insert meat thermometer in roast and place roast on spit. Cook over low coals for about 3 hours and 30 mins, basting frequently with reserved marinade. Spread with half the remaining apricot preserves and grill for 5 mins longer. Heat remaining marinade with remaining apricot preserves and serve over roast. Heat apricots with lemon rind. Remove roast to hot serving platter. Garnish with apricots and sprinkle with coconut and parsley sprigs. *Yield: 6-8 servings.*

Honey-Apple Bread

½ cup shortening
1 cup honey
2 eggs
2 cups pre-sifted all-purpose flour
1 tsp soda
½ tsp salt
1 cup canned applesauce
1 cup chopped pecans
1 3oz package cream cheese
1 tsp cherry juice

Cream shortening until fluffy. Continue creaming while adding honey in a fine stream. Add eggs, beat until well mixed. Sift dry ingredients together. Add to creamed mixture alternately with applesauce. Add pecans. Pour into greased loaf pan. Bake at 325°F for 1 hour. Let cream cheese soften. Add cherry juice, cream to spreading consistency. Serve over thinly sliced Honey-Apple Bread.

Acknowledgement, American Bee Journal



Honey's sources kept secret

A group of North Island apiarists who have proved honey made from some strains of native manuka bush has special antibacterial properties are exporting the honey to Taiwan and Hong Kong at premium prices.

But the beekeepers involved say they do not want their names published, partly because the owners of land where their bees are gathering the special nectar could then seek higher payments.

The beekeepers also fear rival apiarists could check their hive placements during the manuka flowering season and 'hijack' the special nectar by placing their own hives nearby.

Regions with manuka, which produces honey with high antibacterial activity, have been identified by scientists as the East Coast/Gisborne, Central North Island plateau and Waikato.

But the location of specific sites in New Zealand where honey with consistent levels of the unique medical factor can be found is being carefully protected.

The new honey product is the result of work by Waikato University's Professor Peter Molan, co-director of its honey research unit, who investigated the traditional use of honey to treat all sorts of medical conditions. He went as far back as Aristotle, who recommended honey as a medicine.

But Prof Molan found that in addition to the hydrogen peroxide molecules found in most honey - which inhibit the growth of harmful bacteria - the 'bio-active' forms of manuka honey also had another molecule which was more effective.

This 'non-peroxide activity' was exceptionally high in some manuka honeys. The cause of this is not yet know but it is believed to be due to a naturally-occurring compound that exists only in some tree nectars.

Tests have now been developed to measure the potency of these honeys, and the group of manuka honey producers has registered a trademark, UMF, to indicate their product's antibacterial potency rating.

The higher the UMF rating, the more potent that honey's activity against ulcers, wounds and infections. Prof Molan said people with infections could buy a pot with a rating of 10 or more and smear it on. The highest rating so far registered has been UMF 18.

The UMF honey destroys heliobacter pylori, the bacteria found in stomach ulcers, and is also effective against some penicillin-resistant strains of bacteria, including staphylococcus aureus, the most common bacteria to infect wounds and burns.

The honey producers are not making direct medical claims in New Zealand for their product, but researchers have said it is likely consumers will eventually treat high-potency honeys as a therapeutic medicine, and lesser potency honeys as health-maintenance food supplements.

Hamilton business consultant Joanne Bedford has worked with the honey producers to form a supply network, despite the fact that they were used to operating as rivals in a highly competitive industry.

"They recognised that unless they did, they would always remain price takers to the packing and exporting companies who were achieving higher prices for the product, but were not passing on premiums to the producers," she said.

The supplier network then set up a manufacturing and marketing venture, which includes a big health food company, Healtheries of New Zealand Ltd, and a Cambridge company, Bee and Herbal Ltd. The beekeepers are understood to have a half share in marketing business, in addition to payments for their honey.

The Trade Development Board's Hamburg, Vancouver and Kuala Lumpur offices have carried out initial market analysis, and the venture is working with distribution companies in Australia, Taiwan, United States and Europe.

"With Healtheries providing the marketing expertise, we are able to link with their international network to ensure our future export plans cover many more countries," Ms Bedford said.

A UMF manuka honey product has recently been launched in New Zealand and trial export orders to Taiwan and Hong Kong are under way, with further sales in the Untied States and Europe likely.

Acknowledgement, NZPA

Public Holidays and Public School Terms 1998-1999

December 1998

Friday	11	Fourth Term ends Secondary and Composite Schools (or to a day in December which ensures that the school has been open for instruction for 380 half days)
Saturday	12	School Holidays 12 December to 1 February 1999 Secondary and Composite Schools
Wednesday	16	Fourth Term ends Primary and Intermediate Schools (or to a day in December which ensures that the school has been open for instruction for 394 half days).
Thursday	17	School Holidays 17 to 26 January 1999, Primary and Intermediate Schools
Friday	25	Christmas Day Public Holiday
Saturday	26	Boxing Day (Public Holiday observed Monday 28 December)

January 1999

Friday	1	New Year's Day Public Holiday
Saturday	2	Day following New Years Day Public Holiday (observed Monday 4 January)
Friday	22	Wellington Anniversary actual date (observed Monday 25)
Wednesday	27	Term One commences, Primary and Intermediate Schools
Friday	29	Auckland/Northland Anniversary actual date (observed Monday 1 February)

February 1999

Monday	1	Nelson Anniversary
Tuesday	2	Term One commences, Secondary and Composite Schools
Saturday	6	Waitangi Day Public Holiday

March 1999

Wednesday	31	Taranaki Anniversary actual date (observed Monday 8 March)

April 1999

Thursday	1	Term One ends, all Schools
Friday	2	School Holidays 2 April to 18 April 1999, all Schools
Friday	2	Good Friday Public Holiday
Monday	5	Easter Monday Public Holiday
Monday	19	Second Term commences, all Schools
Sunday	25	ANZAC Day Public Holiday

June 1999

Monday	7	Queen's Birthday Public Holiday
Friday	25	Second Term ends, all Schools
Saturday	26	School Holidays 26 June to 11 July 1999, all Schools

July 1999

Friday	12	Third Term commences, all Schools

September 1999

Friday	17	Third Term ends, all Schools
Saturday	18	School Holidays 18 September to 3 October 1999, all Schools

October 1999

Monday	4	Fourth Term commences, all Schools
Friday	22	Hawke's Bay Anniversary
Monday	25	Labour Day Public Holiday

December 1999

Thursday	9	Fourth Term ends, Secondary and Composite Schools (or to a day in December which ensures that the school has been open for instruction for 380 half days)
Friday	10	School Holidays, 10 December 1999 to 31 January 2000, Secondary and Composite Schools
Tuesday	14	Fourth Term ends, Primary and Intermediate schools (or to a day in December which ensures that the school has been open for instruction for 394 half days)
Wednesday	15	School Holidays, 15 December 1999 to 25 January 2000, Primary and Intermediate Schools
Saturday	25	Christmas Day, (Public Holiday observed Monday 27)
Sunday	26	Boxing Day, (Public Holiday observed Tuesday 28)

FEBRUARY '98

MARCH '98

APRIL '98

MAY '98

JUNE '98

JULY '98

AUGUST '98

SEPTEMBER '98

OCTOBER '98

NOVEMBER '98

DECEMBER '98

'1999'

IMPORTANT DATES FOR 1998

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

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

COMING EVENTS...

EXECUTIVE MEETING DATES

7th-9th	December	DUNEDIN
1st-3rd	March 1999	NELSON

STOP PRESS

ADVANCE NOTICE

1999 BEEKEEPERS CONFERENCE JULY 12th to 15th 1999

Hosted by the South Canterbury Beekeeper Branch of the NBA at the Hotel Ashburton, Racecourse Road, Ashburton.

Phone: (03) 308-3059

2000	Conference	GISBORNE

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Editor: Colin Bell
Phone: (09) 818-4325

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

SOUTH CANTERBURY BRANCH
Peter Lyttle
Phone: (03) 693-9189

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

CHRISTCHURCH HOBBYIST CLUB
These are held on the first Saturday each month, August to May, except for January on which the second Saturday is applicable.
The site is at 681 Cashmere Road, commencing at 1.30pm.
Contact Margaret Cooper
Phone: (03) 383-0368

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.
Arataki Cottage, Havelock North.
Phone: Ron (06) 844-9493

MARLBOROUGH BRANCH
Meets every second Thursday in every second month.
Call Jeff on: (03) 577-5489

MANAWATU BEEKEEPERS CLUB
Meets every 4th Thursday in the month at Newbury Hall, SH 3, Palmerston North.
Contact Andrew MacKinnon
Phone: (06) 323-4346

NELSON BRANCH
Phone: Michael (03) 528-6010

NELSON BEEKEEPERS CLUB
Contact: Kevin
Phone: (03) 545-0122

OTAGO BRANCH
Phone: Mike (03) 448-7811

NORTH OTAGO BRANCH
Bryan O'Neil
Ph: (03) 431-1831

POVERTY BAY BRANCH
Contact Barry (06) 867-4591

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

SOUTHLAND BRANCH
Contact Don Stedman,
Ph/Fax: (03) 246-9777

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

WAIKATO BRANCH
Call Tony (07) 856-9625

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

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

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