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AUTUMN

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The New Zealand Bee Keeper

The New Zealand BeeKeeper

OFFICIAL PUBLICATION OF THE NATIONAL BEEKEEPERS' ASSOCIATION OF NEW ZEALAND INCORPORATED

CIRCULATION, 1,550. . .
To Members of The National Beekeepers' Association of NZ Inc. who own more than 50 hives each and so are legally subject to the annual hive levy. **THESE HIVE-LEVY PAYERS OWN APPROXIMATELY 87% OF ALL BEEHIVES IN NEW ZEALAND.**

To Beekeepers with less than 50 hives who subscribe to the journal at $33.75 a year (incl. GST) which also includes membership of the National Beekeepers' Association of NZ Inc.

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IT CAN HAPPEN TO ALL OF US

From Anon.

Today is a red-letter day. One of those never to be forgotten days, engraved with an indelible clarity on the mind. Whether to be sorry or joyful, abject or extrovert is a decision that only time will resolve. The reason for all this soul searching?
Today I Burnt My First Hive

Now this is something which has been undertaken hundreds of times prior to my entry into this field, and no doubt will be continued in the future, long after I depart the beekeeping scene. Apart from the financial loss of the bees and the gear, my pride may be said to have taken a jolt. Why is it that such action was necessary, and will I have to repeat it as time goes on?

Let's go back to the beginning, the establishment of the yard. Through an old beekeeper, contact was made with a farmer to set up a yard in a rural area. The feed situation looking good: clover paddocks in abundance, gorse aplenty for pollen, and no stock wandering in the paddock to tip the hives over. An ideal set-up.

The old timer did comment that in years past there had been an outbreak of brood disease in hives in the area, so bad that he had pulled out altogether. Destruction of hives found infected appeared to suppress the outbreak, but he had not ventured back there. Once bitten twice shy. His warning to be on the lookout for disease was not dismissed altogether, but put on a back shelf in the memory banks.

In due course hives from a city yard were moved on to the site. From the start they thrived. The build up was tremendous, so much so that splits were taken. This possibly reduced any swarming tendency, but two swarms were taken adjacent to the yard in that first season. The honey crop from the yard was a good yield, considering the dryness of the season, except for one hive. This hive held its own in production terms but was slow to cap up the frames. Inspection did not reveal anything amiss, the brood chamber looked healthy, the brood pattern was consistent, with few cells missed. Late in the season only a limited amount was taken, winter feed was paramount, and still there were quite a few frames uncapped. Early May saw the hives all bedded down for the winter, and subsequent visits over the winter months showed no cause for concern. Bee movement appeared normal in relation to other hives.

Spring arrived and in late September the hives were inspected as usual. All hives except one were bursting with bees, food stocks were higher than expected, except for this one hive. Uncovered the brood chamber was a sorry sight. Poorly scattered brood, dried and compressed cells, chalk brood more than evident. A quick rope test was inconclusive, but a frame was pulled from the hive to have an independent analysis. Sure enough, diagnosis confirmed.

The tell tale smell was present, but with disturbance of the pollen frames in the hives my sinuses had reacted by blocking, and no way was I able to determine by smell the presence of brood disease.

Next morning, bright and early the routine was enacted. Trench dug, bees killed off with petrol after blocking the hive entrance, hive sections stacked in the trench and set alight. What surprised me was the time it took to completely incinerate the hive sections. Finally the pit was filled in with earth.

Now the questions remain. How come I missed signs earlier in the season of disease? Easy to answer. Inexperience. How many adjacent hives will be infected. Answer. Only time will tell. Where are the frames I removed at the end of the honey flow? Answer: Lord knows, they long ago disappeared into the general stack of extracted supers. Being full depth, however, has limited their distribution, and only two other yards have any full depth supers on the hives.

How did the disease get into the yard? I'll never know. Located in a disease-prone area they may have been contaminated by feral hives. I have had no contact with diseased hives in yards of other beekeepers. What will the MAF do about the outbreak? I must wait until the following week for the advisory officer to return to his office.

Will the local part-time inspector look at the hives? Answer. Contact the advisory officer. See also previous answer. Do I feel bad about the outbreak? Answer. No, not bad, but mad. My own shortcomings have been rudely revealed, and the back-up state of the advisory services had been revealed. What can I do but be more alert in my future inspection of brood chambers.

What do I want the MAF to do about it? Provide a service that can give me better service back-up, of course. Having to wait days and days is no way to suppress a disease outbreak. Other beekeepers in the area are now aware of my plight, and some have reacted adversly to the news.

The advent of the introduction of the disease prevention levy now looms large in my mind. The sorry state of the existing service has now directly affected me. Will the payment, in my case of some hundreds of dollars, see any improvement in the manpower provided by MAF or the physical shape of an advisory officer? Will I be able to have an officer come to the infected yard within a reasonable time? Will I be able to have anyone come? Leaving aside the justification argument issue, if no improvement over the existing system is envisaged, them my payment of levies will be with much ill grace.

I'll do my part in the prevention of disease in my hives, my livelyhood is at stake here. Will I be able to rely on others doing the same?

Finally a phone call set a date to inspect the yard. The inspection itself was thorough. Each hive was rigorously examined, and I received a valuable lesson on what to look for. Any cell that looked at all suspect was uncapped. Fortunately no signs of disease were found, and an incidental remark from the inspector explained the apparent delay in coming to inspect the hives. Should the initial hive with disease been robbed out, then it would take the next generation of lavae to exhibit the telltale signs of disease in the other hives. This is a point not sufficiently emphasised in the publicity given to the detection of diseases, and in my case, my concern at the apparent delay in having hives inspected was groundless.

Naturally any hive in that yard will be examined for some time to come. Whilst this may cause some inconvience to the bees and result in delays in my routine when working the yard, better that than risk spreading the infection to other yards. To say that this incident has thrown me off my stride is an understatement.

My initial reaction was to blame myself for allowing the introduction of the disease. On reflection this is unfair, as I have not knowingly worked a diseased hive in any other yard, be it mine or someone elses. With only the one hive infected to date is is now obvious that disease is present in the area. MAF have no record of any other hives in the immediate vicinity apparently, so it begins to look as if a ferel hive may be the culprit. It could be that an unregistered hive is to blame, if so, how to find it? Hiring a helicopter is beyond my resources, similarly a fixed wing aircraft also. This leaves me with but one alternative, close down the yard. Better this than continue running the risk of again having hives affected and not knowing the source of the infection.

Loss of a good site is a wrench. However, once bitten twice shy. Some may regard this as an over reaction on my part. Some may be sympathetic to my plight, but how else are we to eradicate diseases? Chance location of feral hives and arranging their destruction would go a long way in this regard. Getting permission to enter property in order to locate such hives is time consuming, with some landowners unwilling to assist. Without any statutory rights we are powerless, and it would be a sad day in our democratic status if such rights were available to us. So having to bow to the inevitable is the only answer apparently. Move out of the area.

Relief was the heading for this dissitation. Yes, it is a relief to know that the rest of the yard is clean. A relief to know that the disease inspection service took place despite the recent cutbacks in government services. Relief to know that this beekeeper has not knowingly or heedlessly contributed to the spread of diseases. To say that it was anyone's fault that disease occurred is perhaps being too tough. Yet unless we, as keepers of bees, are constantly on the alert for those telltale signs that disease is present, we will have to continue to tolerate disease prone areas. Whether to continue to work these areas is a matter for conjecture. For how long can we continue to loose hives will be dependent upon the financial backing of each beekeeper, the extent to which the future proposals for a disease inspection service can be relied on, and the individual willingness of each beekeeper to be prepared to act swiftly in each and every case of an outbreak of disease. Sentiment has no place in situations such as this, and as much as the hobbyist beekeeper may love his/her bees, he/she must be prepared to lose hives if disease eradication is to be successful. Likewise the commercial beekeeper must forgo any profit motive should he have hives afflicted. If recent hive burnings on a massive scale resulted from any one individual endeavouring to harvest a crop before attempting to eradicate disease then our industry is heading for disaster. Profit has its place, but must be subordinate to the maintenance of clean, healthy stock in order that our industry may continue to survive.

NOTE

Dr Stephen Ogden has been appointed Apiculture Services' Manager (South Island). As a consequence of this appointment and funding shortfalls, the 1990 Invermay research programme will be less extensive than was described in the NZBK December.

The projects to be cut are (i) the repeat of the 1989-90 experiment, (iii) liquid feeds, and (iv) Fumagillin in patties. In addition the work on legume reseeding and establishment will be cut back and wound up this season.

Dear Sir,

Can anyone assist me with a research project?

I have two pollen samples, gathered from sites with different soil type. They are to be sent for mineral analysis, to try to quantify the influence of soil mineral content on the minerals in pollen, and hence on hive intake and nutrition. The result will be more useful if a single species common to both samples is first separated out. Is there any volunteer willing to assist with the needed microscopic pollen identification?

Reg Clarke
81 Lakings Road
Blenheim

Dear Sir,

Debates are highly stimulating and Russell Berry in the Spring issue of the "N.Z. Beekeeper" has provided a catalyst for just such a debate as indicated in the summer issue.

It was unfortunate that Russell chose to use the dairy and poultry industries as examples of comparison to beekeeping, as it illustrated his isolation from reality. In complete contrast to beekeeping, the dairying and poultry industries have made a massive investment in marketing and generic improvement. Both these industries can guarantee end product: you only have to feed the animals in question and a harvest is forthcoming: we can feed bees for a nil result.

To contend that we (beekeepers) need to produce a g. of honey more cheaply is in absolute contrast to the industries quoted: they have become more efficient and have achieved improved productivity by increased investment and greater yields per production unit.

My credentials are not dissimilar to Russell's and in addition I have had the opportunity to work with many beekeepers throughout New Zealand and in many countries, e.g. Australia, Canada, USA, England, and Israel. Top beekeepers, in my experience, are those that do the basics well, invest time and money in their production units and achieve consistently high yields.

The focus of the beekeeping industry in New Zealand, if profitability is to be increased, is simple: every hive must produce a crop and the resulting product(s) must be marketed to best advantage.

I contend that it costs the same to have non-productive units as high yielding units, but the cost to produce a crop at low end is more than twice that of an average to high producer and commercial beekeepers have many "sleepers" in their business units (apiaries). One only has to drive around the countryside and observe apiaries at the peak of honey flow to see the results: individual hives with one super to four supers, even no supers.

So let's look back as Russell suggests. I see few beekeepers demanding genetically superior queens, a few using prophylactic chemotherapy to control Nosema, very few considering the worker bee and its nutritional requirements, many taking short cuts and finding their hives cannot take advantage of an opportunity when it arises, viz. hives building populations on a honeyflow. I see resistance by the industry to invest in marketing, genetically superior stock (some movement here at last), replacement of diminishing honey pasturage, failure to increase the hive product range (Royal Jelly, bees, queens, pollination), low profitability (low yields, low returns). I also note the many of those succeeding are those who are not hog-tied by conventional thinking and politics: they critically analyse their performance and that of their business and are often newcomers to the industry. Rarely do they look back: if they do, it is to learn from past mistakes.

I therefore contend that to increase returns the industry must:

(1) Invest in marketing, increase market share
(2) Invest in genetic improvement
(3) Increase unit yield by
  — improving colony performance
  — having every hive produce
  — increasing bee pasturage
(4) Expand the range of hive products
  — Royal Jelly
  — Queens
  — Bees
  — Honey
  — Pollen
  — Brood
(5) Become more efficient and sell our products to best advantage
(6) Increase bee pasturage and investment in farm forestry ventures, viz. Paulownia, a recent introduction

LETTERS

with excellent honey producing potential

The list goes on, but that will do for the moment.

Trevor Bryant

Dear Sir,

I am very interested in a seasonal beekeeping job to get more experience in my occupation. I am a trained young beekeeper (apprenticeship served at Celle, Germany) and am looking for a seasonal job from October '91 to March/April '92.

Thorstem Tietz
Wehlstr. 4ce
D-3 100 Celle
Germany

Dear Sir,

In the Spring 1989 issue of the New Zealand Beekeeper on page 35 (in the article on Time and Motion Study) the following statement is made: Manuka honey is the world's most beautiful honey but it is extremely difficult to extract. Thixotropic honey needs a pricker before it can be released from the comb...."

According to my reference books Manuka is **Leptospermum sloparium.** In this part of the eastern Cape along the coast we get quantities of Australian Myrtle **Leptospermum laevigatum** which I assume is similar to the New Zealand Myrtle. Our beekeepers generally regard this honey as being unextractable due to its thixotropic nature and it is used only for cutcomb honey production. Thus I was interested to see a reference to a "pricker" which will enable this honey to be extracted.

I would be pleased if you could let me have more details about this — how thick is the pricker and how is it used? Does it penetrate right through the foundation?

Mrs E A McGill
PO Box 27528
Greenacres
Port Elizabeth
6057
Rep of South Africa

George Nichols, who wrote this article, has replied to Mrs McGill as follows:

Thixotropic honey has two states, it is normally a jelly but can be liquified temporarily by mechanical agitation or by heating. Heather honey and manuka honey are both thixotropic.

Heating on its own is not the answer since heat also softens the wax and the comb will then collapse in a centrifugal extractor. However, heating to 28 Celsius will help.

I know of four ways of extracting thixotropic honeys:-

1. Manley in England used to scrape the honey off the foundation of the comb, wrap the resulting porridgy messs in cheese cloth and squeeze the lot in a screw-press.

2. The Norwegian honey pricker. I have only seen the advertisements for this. It is a machine with a two banks of opposing horizontal needles in between which the comb is fed vertically. Each needle is springy and is capped with a nylon ball. The needles are pressed into the comb right to the foundation and released again three or four times before moving on to the next piece of comb. This stirs each cell, liquifies the honey temporarily and it is then extracted normally. It is reported to work very well indeed. It is expensive.

3. I think my honey pricker was designed and made by the village blacksmith. It has a vertical shaft with a pricking head at the lower end, the pricking head is made of two banks of no. 15 darning needles, sixteen needles in each bank. Milward in England supplies the needles. The comb is laid on a horizontal tray underneath the pricking head. The comb is moved along after every descent of the head by a pawl and ratchet. The needles pierce right through the foundation of the comb. The ratchet has a very odd spacing, 83 teeth in 393 mm. I have just been along to the honey house to look at a piece of 3/4 Landstroth foundation, the two banks of 16 needles fit the two displaced vertical rows of cells in the smaller dimension but the longer dimension has 76 cells. However the pricker works very well and punches two holes through nearly every cell. The comb is then extracted normally, I suppose the honey for each cell comes out like a long jelly worm but all I can see is a mass of jelly blobs arriving at the extractor wall.

The machine is noisy and dangerous and I fully expect that my wife, who does most of the extracting, will end up with a tattooed hand flapping up and down in time with the machine. I managed to push one needle through my thumb during the setting up stages but I haven't got beautiful hands to start with. Of course if you fail to insert the frame correctly and a needle pierces the woodwork the whole frame hops up and down alarmingly. The inertia of the tray is a bit of a nuisance, if it accelerates fast enough it occasionally double counts by jumping two ratchet teeth each stroke and only punches half the cells. A small rubber brake solved the problem.

4. There is a hand roller with nails sticking out of the surface on the principle of St Catherine's wheel. You can spend happy weeks rolling this from side to side along the combs and gain huge muscles on your right arm, or the other way round if you are left handed. This liquifies the honey and if you are quick enough doing eight frames to load into your extractor it will remain liquid long enough to come out.

Methods 2,3 and 4 do a fair amount of damage to the combs but the bees manage a very good repair. Please let me know if you need any further information or perhaps photographs.

George Nichols

Dear Sir,

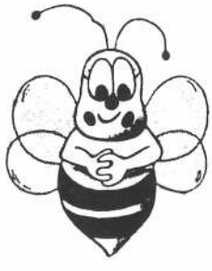
Please find enclosed my renewal subscription. Your magazine is quite expensive although, I feel, worthwhile. May I respectfully suggest a subscription system that covers more than one year be considered, which would offset the cost of commission on $US bank drafts for instance? The annual sub. at present is £8.40 plus £3.00 commission (at the favourable rate of $US1.8045 = £1.00).

Interest rates here are 14% base plus (say) 4% meaning an annual interest cost of £1.51 for the second year, so assuming the same charge for the second year's sub, a saving of £1.49 that is, 1½ pints of finest English beer and that is an overdraft. Sorry to sound penny pinching, but that seems to be beekeeping the world over.

B. Rees
Reedons
Gestingthorpe Rd
Little Maplestead
Halstead
Essex CO9 2SN
England.

PS. I do realise that we overseas readers are not the intended audience.

This letter will be put before the Executive at it's next meeting.
Editor.



Syrup Feeding in Queen Rearing Practice

By Reg Clarke

To produce high quality queens, hive nutrition must be of the best possible standard. Various distinguished experts have given us much good advice on this point, and have correctly concentrated on the importance of a plentiful supply of fresh pollen. Few have gone beyond that, and when I looked for advice on the quantity and strength of sugar syrup to feed, advice was harder to find.

So I turned instead to Dr Mark Goodwin's research on the effect of sugar syrup feeding on the collection of kiwifruit pollen. A great deal of thorough work has been done on this over four seasons. It shows convincingly that feeding sugar syrup within the hive increases average pollen collection by a factor of 1.5 to six times, with individual peak responses of over 40 times. The principal mechanism is thought to lie in the way house bees respond to returning nectar foragers. With syrup generously supplied, the house bees are occupied, and returning foragers find it difficult to find one willing to accept their nectar. They respond to this negative stimulus by switching to pollen collection. This is now in greater demand due to the stimulus to brood rearing, and they can store it in the combs without the assistance of house bees.

The effect of variation in syrup quantity, dilution, and feeding frequency has been tested. Optimum effect was obtained with one litre of sugar (sucrose) syrup, fed daily in the morning via a feeder giving mass access to the bees. Feeding late in the day, with a greater quantity, or at two or three day intervals all had a lesser effect. Two concentrations were tested — 1 M and 2 M (molar units. See explanation in footnote). Fortunately for us there was no significant difference in effect between the weak solution (1 M) and the strong, so we need go no deeper into molar units. Not too many of us are familiar with the number of molecules in 12 grams of carbon 12. We can safely assume the weak solution to be 40% to 50% sugar/water: that is equal quantities of each ⁵ 50% and it makes scant difference whether you use weight or volume.

Here are two effects very beneficial in queen rearing. The artificial "nectar" flow will stimulate all colony activity including brood rearing; though note that this was not tested in the research cited. The increased intake of pollen will improve larval nutrition by stimulating nurse bee glandular activity. It will increase the numbers of nurse bees as well as improving their physiology. Hence we can expect the all-important queen larvae to be better fed, resulting in larger, better, queens.

In my own case there is a third important benefit. I want to supplement the diet in a carefully controlled way with additional minerals and vitamins fed in sugar syrup. Nectar flows have the effect of diluting my intended diet, so I welcome a means of discouraging nectar collection.

Perhaps I take a liberty in transposing Dr Goodwin's pollination research into a quite different field, and I hope he will forgive me. But it seems to me that he has illuminated a fundamental behaviour response, which with a little caution can be applied to our purpose in queen rearing. Firstly, we must ensure that brood rearing is not reduced by syrup processing or storage in the brood combs. This can be done by monitoring brood rearing, by providing sufficient comb space, and when necessary exchanging foundation for capped stores. Secondly we must check that excess pollen collection is not clogging up the brood combs.

Good larval nutrition derived from ample pollen intake is needed at all stages in queen rearing. So ideally this technique should be applied to all hives used in queen rearing, from breeder queens through cell raisers to mating nuclei.

To summarise the recommendations:

1. Frequency: Feed daily, in the morning.
2. Quantity: one litre per feed, using an open feeder allowing mass bee access.
3. Strength: For economy, use a weak solution — 40% to 50%
4. Sugar Type:- White or raw sugar is equally effective, but the latter is more likely to ferment.

Footnote: The molar strength of a solution is measure of concentration which takes into account molecular size. It has scientific precision, but does not suit our purpose here.

Reference.

GOODWIN R.M.; TEN HOUTEN A. Ruakura Apicultural Research and Advisory Unit, NZ MAF. Annual Report, 1989-1990.

NOTE

The following letter has been received by the Executive Secretary from the Minister of Agriculture.

Dear Mr Goodman,

In response to your letter of 18 September 1990, I would like to advise that I have approved a hive levy rate of 55 cents per hive for 1991.

This rate will be published in the Gazette shortly.

Yours Sincerely

Ken Shirley

Minister of Agriculture

A NEW WAY OF REQUEENING

The requeening process in which a young queen, raised at a specialist breeding farm, is introduced into an established hive probably thousands of miles away, is a delicate, complicated and expensive procedure. From capturing the queen, through shipping, until the queen is released and accepted by the hive community, the process requires highly trained personnel, considerable time and labour, and is prone to accidents and queen rejection. At least this was the situation until the development of the Queen's Guard caging system. The new, ingenious system is revolutionizing the whole process, replacing the traditional unsophisticated cage with a modern, hi-tech product that's more than just a cage. The Queen's Guard is a capturing, caging, shipping and introduction system, designed and optimized to streamline every stage of the requeening process. Up-to-date computer-aided-design techniques were utilised to integrate all the features sought by both queen breeders and buyers, in a unique "super-cage". The Queen's Guard "super-cage" is bound to revolutionize the requeening process world-wide.

Capturing the Queen Without Trauma

The first stage, and the most delicate one, is getting the queen into the cage. Traditionally you capture her with bare fingers and ease her through the narrow tunnel into the cage. To manage that without getting stung and without damaging the queen requires experience, patience, and dexterity. Moreover adding a few attendants to accompany the queen on the journey increases the complication and time. On the breeding farm, where thousands of queens are readied for shipment, skilled labour is the biggest cost. The Queen's Guard is designed to cut this cost dramatically.

With Queen's Guard the queen, complete with her entourage, is captured in a single sliding movement of the cage cover. You do it with a gloved hand, and you do it properly even if your only experience in apiary is licking honey. You just put the open cage on the queen and her attendants and 'click' them in. A five second process without hurt to fingers or queens. The time saved already pays for the sophisticated cage, but further benefits are many.

If too few bees are captured with the queen, the cage cover has a special "bees pass only" position where a narrow passage is left open allowing more bees to join the queen while preventing the queen from escaping. The same position is utilised also at the receiving end where it allows the attendants to escape the fury of the receiving community.

The base of the Queen's Guard cage is opaque while the top is clear. You have a full view of queen when you capture her or clip her wings, but you can protect her from sunlight simply by placing the cage upside down. Ventilation holes keep your queen well aerated while you capture the next one.

The cages stack on each other until you are ready to bring them to the preparation shade for clipping, marking, and packaging.

Isolating the queen and holding her immobilised for clipping and marking is as simple as capturing. A special comb is inserted through a T shaped hole in the cage base. The comb spacing is designed to let the small bees through but to push the large queen against the side wall of the cage. Clipping and marking are done while the queen is in the cage, through access holes designed to make this delicate procedure fast and foolproof.

With the queens neatly clipped and marked, without mortality and stings, the cages are packed for delivery to the client. The Queen's Guard is designed to provide on optimal packaging environment. The cage is designed to pack tightly in a stable stack without blocking the air holes. In the Queen's Guard cage the survival rate is high even during tough journeys.

At the Receiving Apiary

When the shipment arrives at the client apiary, the ingenuity of the Queen's Guard system benefits the client as it did the breeder. The features that made capturing and shipping fast and simple, make the reversed process of receiving and acceptance easy and successful.

The clear cover of Queen's Guard cage affords an all-around view of the queen. After quality control inspection the attendants are released by sliding the cover into the "bees pass only" position and placing the cage in darkened box.

Once isolated, the queen is ready for introduction to her future community. The cage cover is pushed into the "queen release" position, which exposes the access hole to the candy outside. The cage is then placed in the centre of the hive at the optimal site for high success rate. Pull out a comb from the centre of the hive, and attach the cage to its centre using small hooks extended from the cage base.

The acceptance rate is further enhanced by the special design of the candy compartment. The tunnel which the bees must dig through the candy block is far longer than in traditional cages. The long acclimation period, while the queen is waiting for her release, is the surest way to enhance her acceptance.

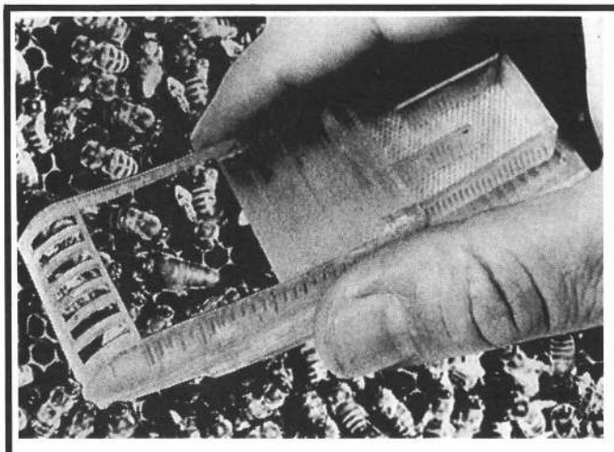
As in the capturing stage, the whole process can be done with gloved hands, by untrained personnel, and in a fast, foolproof manner.

Queen's Bank Building

Even though the high acceptance rate afforded by the Queen's Guard system de-emphesises the importance of building queens bank, some reserves are still required. The Queen's Guard cage was designed to promote queen's bank building. Pre-release of attendants, central placing, and a covered access hole are essential to the bank.

Queen's banks are built by attaching multiple Queen's Guard cages on a single comb in the centre of the hive. Unlike normal introduction, the access hole to the candy compartment is not exposed so the queens are kept prisoners of the bank. When transfering a queen from the bank to the hive, just 'click' the cover into the introduction position, and she's ready to meet her subjects.

The Queen's Guard system was developed by one of the leading Israeli breeder farms in co-operation with a hi-tech engineering firm. The end product is the fruit of many year's apiary experience combined with up-to-date engineering methods.



THE QUEENS REVOLUTIONARY GUARD

We've revolutionized the handling, shipping and introduction of queens with our Hi-Tech Queen's Guard, an ingenuous system to improve throughput and safety while minimizing labour and costs at both, the breeding farm and the cliet apiary. Queen's Guard is the first cage system engineened to optimize every aspect of queens handling, in a streamlined, foolproof process even with undertrained operators.

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- **Safe & sure marking & clipping while queen's in cage.**
- **All around visual inspection and observation.**
- **Optimal placement in hive.**
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- **Safe separation of queen from attendants.**
- **Designed to ease building queens bank.**

Learn more how Queen's Guard can help you by ordering our evaluation kit, a $9.95 introduction to the future.
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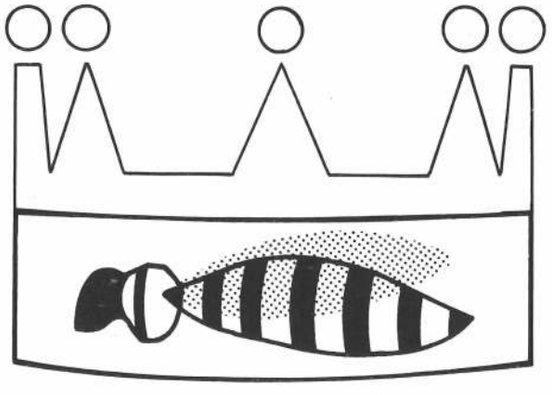

QUEENS GUARD

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HOW TO SEE THE WORLD

Old beekeepers, like old soldiers, usually fade away but this one rode off into the sunset. But sunsets, in common with the end of the rainbow, have a habit of staying at a tantilising distance so Ken Everett and his bike are still trying.

Retired beekeeper and electricity worker, Ken Everett, began cycling at 49 and at 63 is still pounding the roads. So far he has looked round most of mainland Australia and Tasmania for that sunset. In the process he has met snakes, pigs, and near Turkey Creek, Western Australia, thought he heard a crocodile take a huge bull not far from his tent. Ken neither investigated not says what effect the awesome sounds had on his interior economy.

Above: Camel near Millicent, S.A.

However the two-legged inhabitants, the ones that wear clothes, he found remarkably friendly, particularly in the Northern Territory. At some camping grounds the owners appeared to treat cyclists as something special and let him camp free, and frequently people he met would ask him if he needed anything.

One of the big problems was the dearth of cycle repair shops. For example there were none on the 1,825 kms between Mount Isa and Darwin. Although to be fair there isn't must else either.

Another problem was money. Although Ken approached fifty of New Zealand's largest firms for sponsorship the only considerable help he received was from Electrocorp Marketing. To make up most of the remaining money he spent six months working for beekeeper John Fuss of Tintinara.

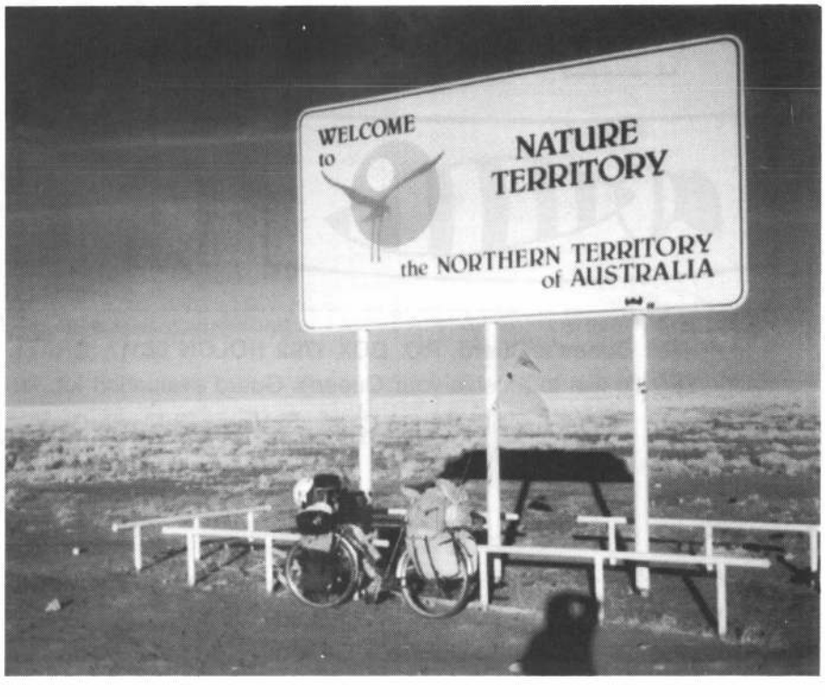
Ken has also 'done' both our North and South Islands and enjoyed most of both. His pet hate is Auckland, an absolute nightmare. It took him all day to get from Manurewa to Takapuna.

Ken began beekeeping by helping Dick Alexander, Golden Bay, after school and during the holidays. That was back in the forties and because of the war Dick could not buy a truck. Instead he used a Harley Davidson with a side box to carry extracting gear to sites where the extracting was often done inside a tent. Hot work extracting manually in such a confined space!

Dick is now living in retirement down the Buller Gorge, near Inanguhua, where he successfully prospects for gold, owns a varied garden and four hives of bees.

When Ken left school Wilf Lennon, the then Editor of the New Zealand Beekeeper, got him temporary work with an ill beekeeper at Poolbarn, Central Otago. That was in January 1944. Wilf was then living at Omakau, not far away.

The Poolburn beekeeper, Bill Marshall, died shortly afterwards and was succeeded by Arthur Myers who had been apiary instructor for Nelson, Westland, and Marlborough. He took over



Below: The border between Queensland and the Northern Territory.

THE HARD WAY

By Michael Burgess

Bill's some 230 hives early in 1945 and Ken stayed with him until he had completed the three month's notice the Agricultural Department then required by law.

Earlier Wilf Lennon had been studying at Otago University to become a Presbyterian Minister. He had been working as a 'Home Missionary' for some time but wanted to become ordained. He had started training during the depression but ran out of money so went beekeeping. He formed a partnership with a friend from University, one Andrew Sharpe, and they set up in the Edendale-Wyndham area in Southland. Later they moved to the Omakau area where they had a picturesque three-storey stone flour mill and a cottage beside a stream for a base.

While Wilf was the editor of the NZBK his honarium was quite modest: Ken thinks about £80 to £100.

Wilf moved to Hawkes Bay in the 1950s where he became Superintendent of the Presbytarian Social Service Association. He was succeeded in this role by John MacFadgen (or McFadzien) who had first succeeded Wilf as Editor of the NZBK. A small world, isn't it?

Andrew Sharpe left the beekeeping partnership to continue his university studies. He became a Rhodes scholar and served as secretary during the war to either Peter Fraser or Michael Savage. He was a distinguished amateur anthropologist and as such some of his findings ran counter to the then thinking but have since been accepted. For example, he propounded the theory that the Morioris were simply an earlier migration of Maoris, that when the Maoris killed the Moriori men they usually keep the prettier Moriori women so the Maori had a lot of Moriori in them. In that day these ideas caused quite an uproar.

Whatever, through his position as secretary to one or other of those politicians Sharpe probably had a profound effect on the early directions taken by the first Labour Government.

After leaving Poolburn when Arthur Myers took over Bill Marshall's business Ken began helping Mr and Mrs J. Horn at Kokanga, Central Otago. They were without doubt the most successful beekeepers he had the honour of working with. Bees were discussed and debated throughout the day. They would listen to any opinion that could stand up under debate and questioning. It was a great grounding for a young chap.

Ken against the ruins of Port Arthur's prison, Tasmania.

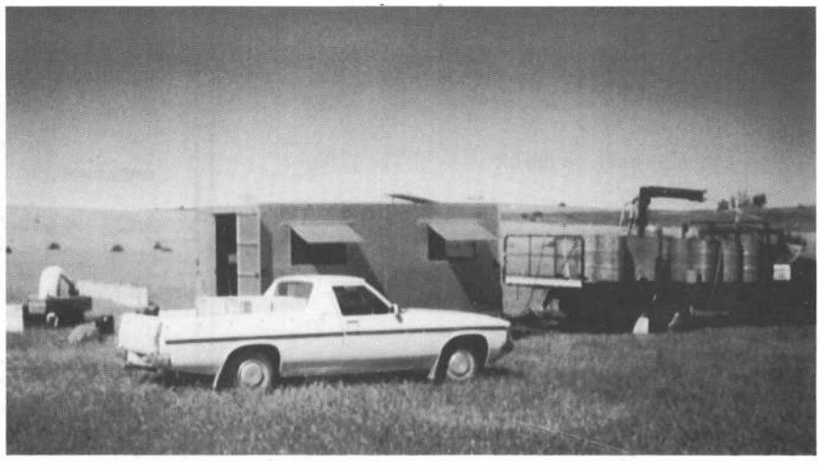
When the Horns had a bad season Ken moved south to Len Box at Heriot. Len had been an apiary instructor in Otago and Southland. Ken started beekeeping on his own at Garston, Northern Southland, with 50 hives and a terrible old Hupmobile truck. Some five years later he moved his then about 300 hives to Centre Bush and did harvesting and bush work in the winter to bring in extra cash.

At Centre Bush he was lucky to have fine neighbouring beekeepers in Colin Cunningham, John de Wit, and Ian McKenzie to whom he sold out about 1860.

Later Ken worked for Harry Cloake, Harold Peck at Orange, NSW, and Dougal Boyd at Arrowtown.

Around 1967 Ken joined the staff of the NZ Electricity Department's outside maintenance section and stayed with it for 20 or so years.

Looking back Ken thinks that the beekeeping conferences of the 40s and 50s were dominated by some extremely able and charismatic characters. He would listen with almost awe to such speakers as Billy Bray and Tom Penrose who brought Social Credit theories into beekeeping. Another notable debator was Wallace Nelson, probably the only supporter of the Communist Party to

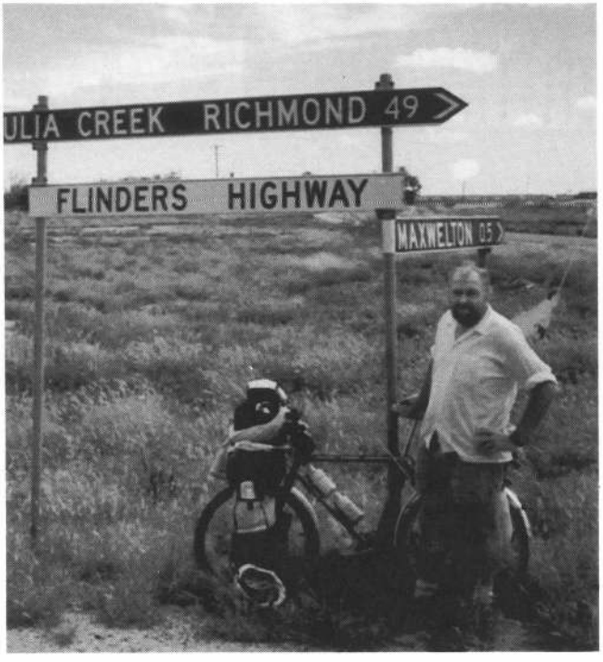


John Fuss's extraction set-up.

hold office in the NBA and become chairman of the HMA.

Ken thinks there is a need for someone to begin collecting the histories of these men, others, and beekeeping in general before memories are lost. He would willingly pass on what he knows of beekeeping in Otago and Southland to anyone so interested.

Wilf Lennon compiled a small book for the Otago and Southland Centennary which mentions some of the pioneer beekeepers. While this book, 'Bees in their Bonnets' was a worthy effort it is far from complete and many beekeepers have come and gone since then. Ken is sure Wilf Lennon would support historic research is he was still alive. He thinks Wilf may have that very point somewhere in his book.



Left: *A road junction on the Flinders Highway.*

Above: *Inside John Fuss's extraction caravan.*

NZ National Beekeepers Association.

Registration Form — Conference 1991

Please register me/us for the following activities:

Full name and address. (give all if party booking)

		Inc GST	Number	Total
Conference Registration Fee	—	$15.00	.....	.....
Seminar Registration	—	$25.00	.....	.....
Dinner/Dance (single)	—	$56.00	.....	.....
Wine Trail Tour	—	$27.00	.....	.....
Patchwork Quilting	—	$30.00	.....	.....

I enclose payment in full of:- $_____

Please send further information on . . . . . (specify)

NOTE:
CLOSING DATE IS 4 JUNE, 1991

Forward to:-
NBA Conference Convener,
P.O. Box 307,
Blenheim *N.Z.*

EXPORTING

The NBA has, with the assistance of its members, established an export liaison group. This group will assist members who:

a) may be considering exporting

or

b) wish to discuss an exporting matter with someone else in the industry.

The following members will be pleased to provide information for members new and inexperienced in the export of honey.

ORGANISATION	CONTACT PERSON	TELEPHONE NO.	FAX NO.
Airborn Honey	Peter Bray	(03)243569	(03)243236
Arataki Honey	Percy Berry	(070)775790	(070)775076
Ceracell Products	Stephen Mahon		(09)2740368
Kintail Honey	Dudley Ward	(0653)48301	(0653)49209
	Jane Ward	(0728)58038	
NZ Honey Producers Co-Op	Kevin Ecroyd	(056)48882	(056)84859
Southern Honey Exports	Allen McCaw	(03417)7198	(03417)7198
Waitemata Honey	Neil Stuckey	(09)4038491	(09)4038556

IT 'AINT NECESSARILY SO

By Reg Clarke

In beekeeping, we must of necessity plan our work around the instinctive norms of bee behaviour, for they cannot be trained like dogs to obey us. We soon find that bees do not adhere rigidly to these normal responses, and we may profit — occasionally — from expecting the unexpected.

Maxim 1. "A hive has only one laying queen."

For sure, there is **normally** only one. But there are probably two or more queens in our hives more often than we realise. Having spotted a queen, we cease to look for them, and of course virgins are very difficult to find. Steve Taber, in his excellent book "Breeding Super Bees", suggests that about 5% of hives contain more than one queen. Generally the second will be a supercedure queen in the process of taking over the colony, and the condition is temporary. Last season, I found two marked queens in a hive that had been united from a two-queen split the previous season; they must have shared the brood nest for over 12 months, and both were in laying condition. Strangely, such hives do not generally produce more honey than a single queen hive, reminding us that the total brood area is controlled by many factors, of which the laying capacity of the queen is only one.

Lesson. When requeening, always complete a thorough search of all brood combs. Failure to do so may cause the loss of one queen in 20 or so. However, you will not know this has happened unless queens are marked.

Maxim 2. "Queen cells must be separated from the hive queen by a queen excluder".

Here I am referring to queen-right cell finisher hives, where the queen is confined below an excluder, with the cells above. Generally, the presence of even an unmated virgin in the upper box will inhibit or prevent cell construction, though capped cells are commonly not attacked until pupation is completed, when perhaps the pre-emergent queens make their presence known. This year, one of my finisher colonies ignored this maxim. I discovered a good laying queen above and below the excluder, and a least three successive batches of good cells had been produced — and none attacked — despite the presence of the second queen.

Lesson. We do not yet fully understand the factors that control queen cell building and supercedure. Sometimes a hive with an obviously defective queen will not attempt supercedure: another will do so when the queen is laying well.

Maxim 3. "A queen does not mate again after she commences egg laying".

This seems to be generally accepted. Yet in an experiment last year I suspected that re-mating may have occurred. A batch of 40 experimental queens were caged after laying for about a week. They were all sister queens from a single drone insemination.

After weighing, 20 were sent next day for examination of their reproductive organs, and the remainder were returned by cage introduction to the nucs until the laboratory could process them. When the second batch of queens were dissected, about 20% had rather higher sperm numbers and sperm density than any in the first batch. Sheer chance, you say — and probably you are right. I mention it only because it is possible explanation of the strange case mentioned below.

Lesson. We should keep our minds open to new ideas, but not commit ourselves to belief too readily.

Maxim 4. "A mated laying queen leaves the hive only to swarm"

True, so far as we know. But we might find a good many exceptions if all queens were individually recognisable. The following example, from a beekeeper whose careful observations I trust, seems to be case of a laying queen transferring herself from one hive to another.

A mated laying queen was introduced to a five-frame nuc: she was easily recognisable being colour marked, and with one leg handicapped by clumsy paint application. Three weeks later the beekeeper returned to the site intending to use this queen to requeen a strong, bad-tempered hive on the site, several feet away from the nucleus. But the nuc. was now queenless. Later, inspecting the hive that was to be requeened, he found the missing queen, already installed and laying!

In the light of what we believe about bee behaviour, how can that possibly be explained? You may prefer to keep the tranquility of your mind undisturbed and reject the facts as quoted. If, as I do, you accept them, we should examine the possible explanations. The bees in the nuc. did not appear to have swarmed or absconded. Even if they had, the small swarm had to overcome the defences of a strong aggressive hive. Did the queen leave alone, and if so for what purpose? If you accept my suggestion that a laying queen may — rarely — take another mating flight then she could on return have entered the wrong hive, and defeated the resident queen. Was the queen rejected by the nucleus bees, and evicted? She was, we know, slightly handicapped. But while that can plausibly explain her departure from the nuc. it makes it harder to believe she could take over the other colony. If any reader has a more credible explanation than my suggestions, I'd like to hear it. For me this occurrence remains in the "unexplained" category, together with UFO stories and the like.

The story also has an interesting postscript. Some months later, noting the queen's hampered movement and poor brood pattern, my informant cut off the offending leg. At the next inspection, the queen was again laying well!

Lesson. We shall learn little about our queens if we do not routinely colour mark them.

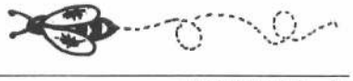
Maxim 5. "Bees always build comb with the point of the hexagon at the top".

Until a few days ago, I was at least sure of this one. But no — I looked carefully at some pieces of free drawn drone comb cut from queen cell frames. Most had their apex to the top as convention and foundation pattern dictates. But one was aligned with the flat side horizontal at top and bottom.

Lesson. Maybe my queen raising practices are such that my bees no longer know which way is up. From thinking about alignment, I go on to think about cell size: how does that universal straight jacket (imposed by the foundation factory) affect the developing worker larvae? If it controls worker size, does that limit the ability of queen breeders to develop more efficient bees?

Maxim X. "Nothing in beekeeping is invariably so, except this maxim — that nothing is invariably so".

Lesson. The more we learn about bees, the more we realise the gaps in our knowledge. Observe the bees, observe . . . observe . . .



International Bee Research Association

From Andrew Matheson, Director, IBRA, 18 North Rd, Cardiff CF1 3DY, U.K.

Many beekeepers in New Zealand know something of the International Bee Research Association — (IBRA), but some are a bit unsure about the position I'm going to. What is IBRA, what does it do, and why should beekeepers join?

The International Bee Research Association is a scientific trust which provides a comprehensive information service on all aspects, practical and scientific, of bees and beekeeping.

IBRA offers advice to all concerned with apiculture in the widest sense: beekeepers, agriculturalists, the food industry, government departments, rural development personnel, botanists and foresters.

So it's primarily an information agency, serving a wide range of people with an interest in bee science or apiculture. By doing this the association fulfils another important role — promoting bee research by encouraging communication among scientists and with practical beekeepers. How does all this happen?

At its headquarters in Cardiff in Great Britain IBRA has a permanent staff experienced in science, information and advisory services, and publishing. Staff are supported in their work by feedback of information from IBRA regional representatives in some 50 countries, and by the experienced scientists who comprise IBRA's international governing council.

The association was founded in 1949 in response to the international need for coordination and exchange of information between individual beekeepers, researchers, government agencies and commercial organisations.

IBRA achieves its aims by:

- Organising conferences and seminars. IBRA convenes an important series of conferences on apiculture in tropical climates, held every four years. The last one was in Cairo, and the next will be in Trinidad and Tobago in September 1992. Temperate beekeeping isn't forgotten either — IBRA co-sponsored a seminar in London last July on honey bee behaviour and physiology, and is organising a seminar on temperate-climate beekeeping for 1994 in conjunction with the University College of Cardiff.
- Disseminating information through journals and other publications (see below).
- Operating a library service. The IBRA library holds a wealth of information on apiculture unequalled elsewhere in the world, with over 50,000 books, scientific reprints, reports and journals. International branch libraries have also been established: in Kenya, Japan, India, and Colombia.
- Providing an international retail service in apicultural publications.

IBRA is a non-profit making organisation registered as a charity. Its continued existence depends upon funding from international donor organisations, and income from the sale of information retrieval facilities, publications and consultancy services.

Support for IBRA's work is also provided by subscriptions from members — individual and sustaining members, beekeeping associations, and other organisations. Members receive free copies of the quarterly journal *Bee World*, and access to IBRA's other services. They also know that they're supporting an organisation which helps beekeepers and beekeeping around the world.

IBRA provides a number of quality publications:

- *Bee World*, a quarterly journal which provides the beekeeper and scientist with articles of current interest.
- *Apicultural Abstracts*, an incredibly comprehensive abstracting journal which covers scientific and practical literature on apiculture and bee pollination of crops.
- *Journal of Apicultural Research*, a quarterly publication of original research from all parts of the world.
- Authoritative texts, conference proceedings, education resource packs, visual aids, bibliographies, multilingual dictionaries.

IBRA also specialises in providing information on beekeeping as it is practised in developing countries, and an advisory service is available to beekeepers in these countries, funded to date by the Overseas Development Administration of the UK government.

The Newsletter for beekeepers in tropical and subtropical countries is published twice yearly and is available on subscription to beekeepers anywhere. Various informative leaflets and charts are also available. IBRA welcomes news of all beekeeping development projects, however large or small.

During my contract as Director of IBRA I intend to develop and expand the services offered, so that beekeepers in every country have access to information and advisory services suited to their needs. I particularly look forward to the opportunity of working for New Zealand beekeepers and apicultural institutions, and will expect feedback and support from the industry in this country.

For further information about IBRA and its work write to the association at the address given at the top of this article, or contact IBRA's voluntary regional representative for New Zealand: Peter Brunt, Primary Industries Manager, Nelson Polytechnic, Private Bag, Nelson. Phone (054) 47796. Fax 82902.

Introducing your new Queen Bees

From John Heineman

If queen bee breeding and cell raising are the most written about bee subjects then surely the introduction of the royal ladies must be next in popularity with our bee matter authors. Mr Snelgrove's classic "The Introduction of Queen Bees" contains 200 pages * and he has not covered every method or variation put forward by many other experts and would-be experts.

The trouble is that a number of these methods will work well under certain conditions, but cannot be accepted as the safest and surest ways. Also this abundance of information can be very confusing, especially to a beginner beekeeper.

Without any doubt the key to a colony's success is a good queen, given that other essential requirements for its well being are not lacking.

So no one wants a failed introduction, no matter if she was an "expensive" one bought from a queen breeder or a "cheap" home-raised queen. Besides a direct financial loss there is the extra delay in making the colony function properly which in turn will probably result in a smaller amount of surplus honey for the beekeeper. Then there is the amount of frustration we can all do without.

We will look at a few simple methods of introduction which have worked well for us over the years, with a rate of acceptance of better than 95%. No particular method is infallible. Facing reality, something will go wrong sometimes. A high degree of success can be secured if certain essential rules are adhered to and conditions within the hive as well as outside it are observed and taken into account.

There is a difference between the queens we may have to introduce:

1. The mated queen in a cage as purchased from a queen breeder;
2. The mated queen held in a small colony (nuc(;
3. The virgin (unmated) queen;
4. The unborn queen, in other words a ripe or nearly ripe queen cell.

The conditions and circumstances which must be considered:

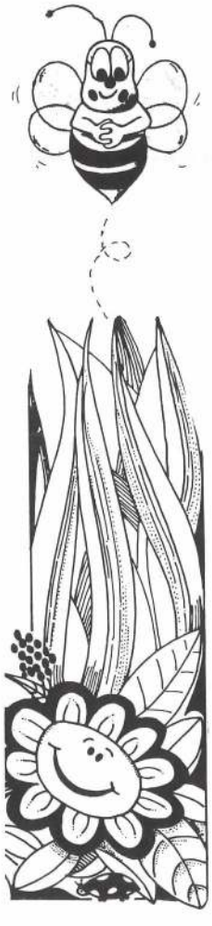
a. The weather before and at the time of introduction. Has it been fit for the bees to go out for pollen and honey?
b. The condition of the colony which will receive the new queen. Is it well supplied with stores, is some nectar and pollen coming in to put the bees in a good mood, is it weak or strong, hard to handle, queen-right, failing queen, laying workers?

Then there are some proven points which affect acceptance of a new queen:

I. A colony must be made queen-less before introducing a new queen, including the removal of any laid-in queen cells.
II. A small colony usually accepts a queen more readily than a large one.
III. Bees recognize the odour of their own queen and will remember this characteristic for about a day after she has been removed.
IV. Introduction of a new queen is easier when fresh pollen and nectar are available than during a dearth.
V. The presence of young bees of nursing age in a colony and close to the queen to be introduced is important because they will communicate with her and attend to her with the result that she will be accepted after a short time as their own.
VI. Laying workers, found in colonies which have been queen-less for too long, make successful introduction of a new queen difficult and frequently impossible.
VII. Stroppy black colonies are more difficult to requeen than the gentler italians.

It is important to keep these points in mind, to understand why certain conditions must be present in a colony and that certain actions should be taken to simulate these conditions if they happen to be absent.

Some people will advocate "short cuts" but really you should play it safe



and make certain, as far as humanly possible, that the new queen is not only accepted but is also in first class condition to commence duties.

THE MATED CAGED QUEEN has arrived in the mail in her wooden or plastic cage together with a small number of attendants. Place a drop of weak sugar syrup on the wire or slits of the cage and keep them under normal room conditions till you are ready to put them out. Do not keep them in a hot place, near a fire or in the sun, and beware of fly spray.

You have made up your mind which colony is in need of the new queen. If the hive is strong enough I suggest you make a nuc on top. First look for the old queen. If you find her put aside the frame she is on. Place two combs with brood and adhering bees into the super which serves as a nuc box, shake in some extra bees, give it a comb of pollen and the equivalent of two combs of honey. Have a division board underneath and a cover board on top. Replace comb with old queen in parent colony, fill gaps with empty combs and make sure that the parent colony has sufficient stores.

Place nuc on top of parent colony. Plug up nuc's entrance fairly tight with green grass. If you cannot find the old queen take two combs of brood and shake off all the bees into the parent colony and place the nuc super on top. Leave it for a few hours and plenty of bees will have come up through the excluder. Then put in the division board and plug up its entrance.

A nuc placed over an excluder can be left for one or two days if it is more convenient to make the preparations before the queens have arrived. It is most unlikely that the bees will put on queen cells but it won't hurt to make sure before introducing the cage. But don't do this with a nuc above a division board. Then cells will very probably appear.

A little time, 20 min. to a half hour, between having made the nuc ready and the introduction of the new queen, will result in the nuc being aware that it has no queen. This, I think is an advantage, it will certainly do no harm.

Now you can insert the cage with the new queen just as it arrived in the mail.

In our experience there is no need to first remove the attendants, unless dead bees are present in the cage or if introduction is being delayed for a prolonged period.

First remove the cardboard square over the candy hole in the wooden cage or break away the seal of the plastic cage. Place the cage between the brood combs just below the top bars so that all all the wire gauze surface or the slits of the plastic cage are freely accessible to the bees and not obstructed by comb surface. Keep the candy hole facing up. The queen will exit through it and you don't want it obstructed by the corpse of an attendant bee. Squeeze the combs with the cage between firmly together so that it will not fall down. You will find that with 10 frames to the box it is often impossible to place a cage in this manner. One of the reasons why I like to have nine combs in brood boxes.

With the cage placed in this manner a wide space between the combs is created and sometimes the bees will build some bur-comb. However that is easily removed and of no consequence.

Once the caged queen is in place close up the hive and leave it alone for at least five days. Then have a quick look to see if the cage is empty and, if so, remove it. But do not interfere further with the nuc, much better to let the new queen get properly underway and wait till she can show you a good patch of brood.

It will usually take about three days before the queen is released from the cage. This time factor is important for it will give the bees the opportunity to become familiar with her as they communicate with her but without the risk of harming her. So don't try to speed up the release by removing part of the candy or poking a hole through it. Leave it to the bees. A too early release could mean trouble. Even if the queen is not killed she may be hurt or mutilated if there is hostility towards her which will result in supersedure, something we do not want to happen.

Once the new queen shows a satisfactory brood pattern the next step can be made. Namely uniting the nuc with the parent colony thus introducing the new queen to the unit she is meant to serve.

Preferably first find the old queen, either skittle her or put her aside into a small nuc if you want to keep her for a while. Then simply take away excluder and division board, place a double sheet of newspaper on top of the parent colony, cut a few small slits in the paper and place the nuc on this.

If you do not wish to have three supers in the brood nest, you can take one of the two bottom supers, shake the bees out in front of the hive and place it on top of the nuc over a queen excluder.

This uniting of parent colony with nuc can be delayed so as to keep both queens going to build up a strong colony to gather that hoped for honey crop.

Removal of the old queen is not strictly necessary as the young one will in most instances be the winner. However it is a risk better avoided.

If you do not want to use the entire nuc for uniting because perhaps both units are very strong, or you have another application for the nuc in mind, such as the introduction of another queen or queen cell, just take one or two combs away from the parent colony. Take the comb with the new queen and bees and, if wanted, another comb with brood and bees, parcel these neatly up in newspaper and place them into the gap of the top two combs taken from the colony to be re-queened, after you have of course removed the old queen. A few small slits made in the paper will assist the bees to make a start in gnawing it away. By the time this is done both parties are used to each other and the queen will be welcome. It works as well as uniting a super on top.

SPLITTING a colony is another way where it is possible to keep the old queen going while introducing a new one. If a hive is strong enough but not overstrong, say six combs of brood, place a couple of combs of brood and the old queen in the bottom super and leave the rest of the brood combs in the top box. Both supers should of course have an adequate supply of stores. Select the combs with hatching brood for the top box as these will produce young bees in the very near future.Also make sure that the top has plenty of bees as there is more brood to keep warm and also a number of field bees will drift back to the bottom. Insert the division board, entrance to the back or side, plug up.

The new queen can now be introduced into the top half. A disadvantage can be that there will be less room for broodnests to expand. Uniting again in the same way as above with newspaper.

The beauty of these methods is that you will keep the old queen going while the new one is finding her feet and proving herself. I am a strong believer in the wisdom of keeping old boots till one has new ones which fit whenever possible.

However it is not always possible to make a top or split a hive. It may not be strong enough because the old queen has been performing poorly. But there is still some brood and a reasonable number of bees. In a case like that the only way is to de-queen the hive and introduce the new one direct into the colony. It would not be worth it to keep the old queen in a small nuc for who wants a poor performer.

An old failing queen or one which has turned drone layer (has run out of sperm) always needs urgent replacement. If there is still a reasonable bee strength and some worker brood

present direct requeening is the way. If you doubt bee strength or think that there are too few young bees it will be a good idea to give it a couple of combs of hatching brood from another hive which can spare it. Place the caged queen between those extra combs.

A QUEEN-LESS colony, especially if it has been without a queen for a considerable period, which may happen in early spring, is difficult to requeen. The population has aged and there will be no young bees of nursing age present. One can again try to insert some combs with hatching brood and give it some time for young bees to emerge before introducing the caged queen but far away the best will be to use a nuc to unite. Reduce such a hive to one super before uniting it with a nuc.

Sometimes we may find that a colony which has lost its queen has LAYING WORKERS. Of course nothing else but drones will be coming from those worker eggs, that is if they come to anything at all. Just don't try to patch up such a colony with brood from another hive prior to introducing a new queen. Most likely it will be a waste of time and effort and the loss of a good queen. Unite with another colony or if you do think it worth it unite it with a good strong nuc with a young queen.

Introduction of a new queen to one of those real nasty black colonies can also be a problem. In the first place it can be difficult to find the old queen because these bees are often hard to handle, run all over the place, and have a habit of clustering. You can try to shake all the bees over a queen excluder. Put the hive aside and place an empty super on its bottom board. Shake the ees off four or five frames onto the colony, place these combs in the empty super, excluder on it and super from the hive on top of the excluder. Then shake all the bees into this setting, the clean combs aside. With the help of some smoke the bees in the super above the excluder will go through it to the combs below but for the drones and the old queen. Try to spot her and screw her neck. Re-assemble the hive and introduce your caged queen. A fair possibility she will be accepted after giving the colony this upsetting and confusing treatment of shaking and smoke. However I would still prefer to unite a good strong nuc with such a hive.

It may happen that you come across some very ripe queen cells and want to make use of the queen which is in the process of hatching. The result is of course a VIRGIN QUEEN. Watch your step for the hive which produced this cell could have swarmed or superseded. In that case it will need that queen and welcome it. However if it is surplus to requirements you may be able to use it. An empty matchbox will hold it temporary or better carry a plastic queen cage or plastic hair curler in your pocket for such an emergency. The last named article makes a good cage. Plug up one end with a cork or bit of dowel. After the queen has been put into it (with great care!(the other end should receive a plug of candy, but since you will probably not have that and a mix of some honey with a bit of bur comb will do the trick. No escort bees are needed if you house this virgin shortly. A short length of light wire put through the curler against the cork and bend into a U makes it easy to fasten to a comb. Best destination for such a virgin is a small nuc. Introduce the cage or curler in the same manner as discussed above. It does not matter that the exit hole of a curler will point downward as in this instance there will not be any dead bodies to bloc the hole. You will of course have to wait longer to be able to judge the young lady's performance as she needs to be mated first.

Then as a last we have the ripe or nearly ripe queen cell. Sometimes you can buy these from queen breeders (if you are not too far away from one), or get some from a neighbour who raises cells, home raised or perhaps you come across some nice swarm cells you would try your luck with.

Introduction into a small nuc is my preference. Do it in the same manner as you would do it with a caged queen. A cell without a base (sometimes wax cell cups are mounted on small blocks of wood) can be pushed into a brood comb or fastened to it with a small U shaped wire. The same goes for plastic queen cells. The ones on a wooden base can be hung between the topbars of two frames. Cell protectors are used by some and will probably give a degree of extra security. A short length of plastic garden hose or simply a "bandage" of sticky masking tape does the job. Be careful to leave the point of the cell uncovered for that is where the queen will issue from. When ready the young queen will literally bite her way out of the cell leaving a neat round hole with the capping sometimes still attached at one point like the lid of a man hole. When a cell is destroyed by another queen or worker bees you will see a ragged hole on the side of the cell.

Using cells to requeen hives is done a fairly large scale by commercial beekeepers. Either a top is made or the hive is split. I would think that the success rate of requeening with such a system will be somewhere near 75% on an average.

There are many other methods of introduction and you will be told that it is possible to let a new queen run into the hive entrance with the help of smoke or just drop her on to the top, roll her into honey etc. They work under certain conditions. Try them out if you want to but don't blame me for the failures.

THE IMPORTANCE OF A SINGLE MARKET EUROPE — EUROPE 1992: THE FACTS

The Single European Act commits the European Community to the aim of progressively establishing a single market by the end of 1992.

It defines the single market as "an area without internal frontiers in which the free movement of goods, persons, services and capital is ensured in accordance with the provisions of the Treaty".

The single market is an opportunity for "business driven by business" and is designed to sweep away any remaining trade barriers.

The European Community now has a domestic market of over 320 million people - very nearly as many as the United States and Japan combined.

The EC is the world's largest trading partner with around 20 per cent of all trade, a significant proportion of which is with the world's other wealthiest trading blocs, the United States and Japan, and the six countries (Austria, Finland, Iceland, Norway, Sweden and Switzerland) which make up the European Free Trade Association (EFTA).

The single market offers major opportunities for New Zealand companies to trade with the Community and to expand their interests within Europe.

Already major Japanese companies such as Nissan, Sony, Toyota and Honda have been quick to see the advantages of using Britain as a manufacturing base for the rest of Europe - indeed the level of foreign investment in Britain has soared by over 300% in the last decade.

The Invest in Britain Bureau is able to provide a great deal of assistance to companies wishing to locate in Britain - as a Government Agency it is the only one of its type representing the whole of the United Kingdom.

The Commercial Section of the British High Commission has just received additional copies of "Europe 1992: The Facts", a 68-page booklet outlining everything there is to know about the single market programme.

The booklet begins with a guide to how the EC works, its external trade policy, and its relationship with the EFTA countries. It goes on to cover a range of topics including standards, testing and certification, environmental policy, company law, transport, and telecommunications in addition to providing information on various commodity categories.

"Europe 1992: The Facts" is available from the Commercial Section of the British High Commission, PO Box 369, Wellington. Telephone: 04-726049. Fax: 04-711974.

South Canterbury

At the time of writing, honey crops in South Canterbury appear to be below average. In some areas the flows are tapering off, or already finished.

We had an excellent start to the season with a good wet spell in early December and beekeepers had to carefully and regularly monitor feed supplies. The countryside looked in excellent condition and good honey crops looked assured. But along came two weeks of strong nor-west winds in mid-December, wrecking bee populations and crop prospects in some areas, especially on the plains and high country. In early January the wind blew from every direction, but some honey was gathered during the second week. One day the temperature soared to 36°.

A spell of settled weather is now required to boost crop prospects in areas where honey can still be gathered.

A South Canterbury bee club has been formed with an excellent response from local hobbyists. A recent meeting was held at the NZ Beeswax Processors' factory, with Peter Lyttle and staff demonstrating how to manufacture foundation. That was followed by a visit to an apiary in various stages of development. Judging by the interest and enthusiasm shown, this club has an excellent future.

One now hopes for some good autumn rains so hives may fill bottoms with nodding thistle or catsear.

Peter Smyth

Marlborough

We have had borage and clover honey after an absence for two seasons as well as the manuka/manuka flow. Best rain for years at the beginning of November helped. Most areas have an average crop but some very good patches.

Some beekeepers reported very late swarming-the swarms were quite large.

Organisation of conference going well. Registrations close on the 4th June 1991. For further details see the placement in the journal. Marlborough being the 'Gourmet Paradise,' with lots of activities, sites to see, fine food and wine to select.

Coming events include a wasp nest finding day at Whites Bay. A popular beach and DOC camping ground with lots of scrub and native bush behind. Sunday 17th February at 10.30 am. We dig the nests the following day and send them to the DSIR for examination for the predatory wasps. Last conference the programme was called a limited success as parasites had been discovered in some wasp nests at Pelorus Bridge, and thats after 2-3 seasons after the release of the parasites. I wonder?????.

'Help Reg' day. Actually called the 'Reg Clarke's Experimental Day' on March 10th. (This does not mean we experiment on Reg). It involves weighing the honey, the hives and doing other exercises. These hives have some queens reared with extra nutrition.

This last spring Dave Grueber, MAF, and I have been doing some unofficial investigation of Chalkbrood/American foulbrood infections. We had a hunch that AFB symptoms were being hidden by chalkbrood. After sending in various samples for analysis and getting a positive return for the AFB on some of them a picture is emerging. These chalkbrood mummies are from otherwise clean hives as far as AFB symptoms go. The spore counts at AFB spores are very low, 3 to 4 per mummy versus the millions in a ropey sample. I picked on mummies with a protrusion that could be construed as a tongue sticking up. The correlation between this factor presence and AFB positive is not conclusive. More research needs to be done.

All this ties in with Dr Denis Anderson's comments that he could probably find AFB spore in any hive in NZ.

James Jenkins

Southern North Island

With the excellent spring build-up, we had high hopes of a top crop. But those hopes faded with the onset of the drying winds which swept over the whole region in December and January.

Very little honey flowed in after New Year's Day. Any crop on the hives came early. Those with hives in kiwifruit orchards missed out on a box of honey. Hives not required for kiwifruit and sited on coastal areas did fill a box and more.

Kiwifruit pollination began late and was rather spread out so that for some it was a rush to return hives to permanent sites and super up before Christmas. Kiwifruit orchardists need to understand that our charges are not excessive — only compensation for lost honey crops, for extra work in building up hive strength, and for controlling strong hives in readiness for pollination.

Taranaki beekeepers so far have half their usual crop with more honey possible if rains come soon. The honey season has finished for coastal areas north of New Plymouth and south of Wanganui to Wellington.

Inland hill country areas of Wanganui and Taihape cropped well from bush sites but pastures are parched and prospects for clover honey which normally comes Jan/Feb are poor.

John Brandon

Nelson

Last year I said the bees showed little interest in the barberry but this year it was different. This year the weather was good and much was done in quick time although there seemed to be more rain and the spring was warmer.

The kiwifruit pollination had a miserable start with bad weather which would have worried many growers. I have not heard how blossom setting fared locally but syrup feeding by some growers may have resulted in a little more fruit being set.

It is too early to predict our honey crop, but strong, drying winds burned up the pastures in four or five days and now cold southerlies and showers bringing the odd cap of snow on the ranges would not suggest a good crop.

I don't know how other areas fare but our nearest supply of beekeeping appliances is perhaps Blenheim, then Christchurch, although Kaipoura has woodware. That makes the nearest to us just on 100 miles.

Ron Stratford

Canterbury

A week of screaming North-westerlies in mid-December put paid to what could have been the big one for Canterbury although spring and early summer looked great. Pollen sources were good and the bees were coming up well. Coastal rain during December gave a couple of boxes south of the main railway but the central plains are a disaster. As I write in early January the winds are blowing again so there is no hope for a recovery in this area but the upper plains and foothills could yet yield a reasonable crop.

Swarming on the plains was limited: perhaps the theory that the bees are able to predict the honey season is not far from wrong. This theory could be strengthened even more by the fact that strong hives in honey dew areas were tossing coins to decide which were not going to swarm. The ones that stayed home gathered plenty. This good flow coupled with the best price ever and a

rising market has given those who rely on this rather fickle crop a much needed boost.

We hope that the autumn honey flow may have helped some of those who had a bad clover year. However we also hope that those who shift to the dew do so with some restraint and consideration to beekeepers already there and also to the foresters and farmers.

David Penrose

Bay of Plenty

The Spring passed and pollination weather was mixed with the bees doing most of their work between showers early in the season. However the weather improved later. Sugar had to be fed to stimulate the bees in orchards. As for honey flows the bush produced very well but clover was not so good. Some beekeepers concentrated on thistle.

The Branch held a Christmas BBQ to farewell Andrew Matheson who is overseas-bound in search of greener pastures. All expressed their sincere thanks and gratitude for everything Andrew had done for the beekeeping industry.

Thanks to Dave and Prue Debreceny for the use of their home for this event.

All the best for the coming year.

Karl Christophersen

Southland

Here we are with the first week of January over and as I write this report the weather is uppermost in our minds. As with the last report to the NZ Beekeeper we are experiencing showers and sleet. This time of year, until the first honey is on the hives, is what I call barometer tapping time as we anxiously wait for the weather to improve and the honey flow to begin. Although it has been very windy and inclining to be dry we now have had enough rain and wind. With the clover looking as good as I have seen for a few years we patiently wait for things to improve.

Our field day this year is at Mr Ken Thompson's property, at Brydon 24 kilometres south of Gore on the main road, on Saturday February 2 starting with morning tea at 10 am. A very interesting programme has been arranged with plenty of time to talk and meet old friends and fellow beekeepers. The school baths are handy so bring the kids' togs if the weather is fine.

Alister Lee

Northland

Perfect weather for manuka which has flowered in its usual profusion. Occasional showers are keeping the nectar flowing in the pasture flowers. We started extraction very early and have just filled our first four drums. If the season carries on as it has started we will have a huge crop, so the price will be depressed as usual by beekeepers under-cutting each other.

George Nichols

Westland

Spring treated us reasonably well in Westland this year: what could be called 'good average', some rain but adequate sunshine, giving the hives plenty of flying opportunity. Stores, however, soon ran low and necessitated the feeding of above normal amounts of sugar.

By the end of October the hives were looking good and the prospects of a reasonable crop promising, but for one factor: the weather. Most areas of the province received considerably below their average yearly rainfall. Yes, you guessed it. The weather deteriorated and became changeable and unsettled from wet and cold, with snow on the mountains to hot, humid, wet or cloudy weather. One area of central Westland received a metre of rain during November-December, putting it a little above average for the year.

One of the best flowerings of Kamahi for some years largely went begging. At the time of writing the crop looks like it will be below average.

Westland Branch plans to hold and Autumn Field Day this year, with the emphasis on wintering, and associated aspects. Final details will follow our next Branch Meeting.

Sandy Richardson

Otago

A fair number of branch members reinforced by Dunedin Beekeepers' Club members and students of Telford Rural Polytechnic indulged in some thorough BL searching during two diseasathons. These were based at Alexandra MAF and at Invermay Ag. Research Centre (Mosgiel) and directed by Messrs Mathew Sole (MAF) and Steve Ogden (Invermay). A well prepared itinerary indeed which found a number of infected hives. Besides serving the purpose of disease checking the educational aspect of these days proved invaluable to some participants.

A system of computer hive recording, developed by one of our members in conjunction with Otago University, was demonstrated at our last 1990 meeting. A really enjoyable social hour followed.

Now, early Jan. '91, crop prospects are still in the crystal ball stage. The weather was very changeable during December, with lots of strong winds. Lately temperatures have been below average and some parts are still suffering from very dry soil. However it is not too late for a reasonable crop. We just have to keep hoping.

John Heineman

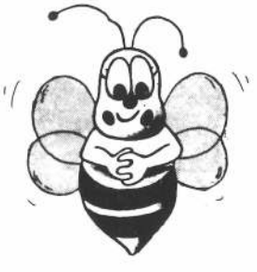
Hawkes Bay

It may be that the 1990-91 honey crop could be a little above average in our area. While it is a bit soon to forecast accurately, the fine warm summer, with some moisture before Christmas (not enough admittedly) pointed to a better return than most keepers have experienced over the last five or six years.

Inspection day early in November was again our main "branch happening" over the last few months. While figures at the time of writing are not available it was still an excellent turn out and a good job well done. Our thanks again to our faithful Mr Ted Roberts for being commanding officer for the day and hopefully we shall hear the full results at our field day on Feb. 16.

Our President Mr Bob Wotherspoon and his helpers are to be congratulated on their efforts in establishing our branch apiary. Something that has been talked about frequently over the last three years it is now a reality. We hope members will support the project and make it a success. March 23 is the suggested date for a branch get-together on the site and to check progress. Watch the buzz-sheet for further information.

Gordon Sutton



National Beekeepers' Association 1991 Conference

AGM, Conference of Delegates, and Seminar
Blenheim, July 15-18

VENUE: Blenheim Country Lodge Hotel, Alfred St., Blenheim
P.O. Box 747. Telephone: (057) 85-079. Fax: (057) 80-337

★ ★ ★ ★ ★ ★

N.B.A. Seminar
Theme: "More Professionalism in Beekeeping"

Beekeeping in the '90's
The Computor as Hive Tool
Stop Keeping Bees — Make the Bees Keep You
Marketing Options — Honey Sweeter than Wine

★ ★ ★ ★ ★ ★

PROGRAMME:

Monday 15th	**Specialty Group Meetings** From 1 p.m.
	Social "Happy Hour" From 6 p.m.
Tuesday 16th	**NBA Seminar** 9 a.m. to 4.30 p.m.
Wednesday 17th	**Conference** All day, from 9 a.m.
	Wine Trail Tour Afternoon
	Conference Dinner/Dance Evening
Thursday 18th	**Conference** All day, from 9 a.m.
	Patchwork Quilting Workshop.

COSTS:

Conference Registration $15
Monday Social. Free "Happy Hour", then at own expense.
Seminar Registration $25. Inc. am/pm teas and light lunch.
Conference Dinner/Dance. $56 (single)
Wine Trail Tour. $27
Patchwork Quilting Workshop. $30 (includes materials)
Note: All costs are inclusive of GST

REGISTRATION.

Please assist us by registering in advance, not later than 4 June, 1991, on the form in this issue.

★ ★ ★ ★ ★ ★

VENUE: The Blenheim Country Lodge is our leading hotel, with top class appointments, and full conference facilities.
The friendly relaxed atmosphere guarantees maximum concentration and achievement.
There are 54 bedrooms with either one double bed plus divan, or two double beds.
The special Conference room rate is **$75.00**
Marlborough is New Zealands "Gourmet Province". The award winning restaurant features the best of local food and world-acclaimed wines.
The hotel is only two minutes from the town centre, and there is a wide range of leisure activities and tourist attractions for your enjoyment. Stay a few extra days — sample the Rainbow skifield, cruise the Marlborough Sounds, see the whales off Kaikoura.

TRAVEL. Frequent flights serve Blenheim Airport. Hotel courtesy car and taxis available. Twenty minutes from Picton and the Interisland Ferry.

EARLY RESERVATIONS ARE ADVISABLE — BOOK NOW — DIRECT TO THE HOTEL

The Marlborough Branch extends to you a cordial invitation to Conference, 1991 — enjoy a winter break in our sunny "Gourmet Paradise". All correspondence and enquiries to:-
Conference Convener, P.O. Box 307, Blenheim

LIBRARY NOTES

A box of goodies arrived from Mr Trevor Bryant. Thank you very much Trevor. Some of the items were "bee literature" but others more or less on the "fringe" are of interest especially today with the trend towards health food, tree crops, and organic farming. Get out your catalogue and bring it up-to-date.

U.S.D.A.
BEEKEEPING IN THE US 1980 rev. ed., 193 pp.

Cunningham D.G.
BEEKEEPING IN TASMANIA. rev. ed. 66 pp.

Anderson R.H. & oth.
BEEKEEPING IN SOUTH AFRICA, 190 pp.

Smith F.G.
HONEY PLANTS OF WESTERN AUSTRALIA, 1969, 78pp, Aust.

Smith F.G.
AN INTRODUCTION TO BEEKEEPING IN W. AUSTRALIA, 1968, 21pp, Aust.

Ruttner F.
THE INSTRUMENTAL INSEMINATION OF THE QUEEN BEE, 1976, 123pp.

MAF
QUEEN BEE PRODUCTION AND ARTIFICIAL INSEMINATION, Telford 1979

MAF
QUEEN BEE PRODUCTION COURSE, Flockhouse 1976.

Gill R.A.
AN ECONOMIC EVALUATION OF ALTERNATIVE MANAGEMENT PRACTICES AND ENTERPRISE STRUCTURES IN THE AUSTRALIAN BEEKEEPING INDUSTRY, 1989, 175pp.

B.C. Hon. Prod. Ass. & B.C. Min of Ag.
Brit. Columbia HONEY BEE STOCK IMPROVEMENT PROJECT: STOCK DEVELOPMENT AND QUEEN PRODUCTION DEMONSTRATION PROPOSAL. 1980, 25pp, Can.

TSK & MP Johansson
SOME IMPORTANT OPERATION IN BEE MANAGEMENT 1978, 145pp. UK.

Min. of Ag. Canada
HONEY PAMPHLET.

Min. of Ag. Canada
BEE HIVE CONSTRUCTION, 1976, 21pp.

Min. of Ag. Alberta
FARM GUIDE (includes chapter on beekeeping), 1976, 336pp, Can.

Min. of Ag. Canada
GROWING AND MANAGING ALFALFA IN CANADA, 1980, 48pp, Can.

Min. ofAg. Canada
SWEETCLOVER PRODUCTION IN WESTERN CANADA, 1977, 14pp.

Dept. of Ag. B.C.
POLLINATION AND FRUIT SET IN TREE FRUITS, 1975, 20pp, Can.

Harvey Craig.
INSECT PESTS, 1973, 27pp, Can.

Helson G.A.
INSECT PESTS (MAF bulletin 413), 1974, 195pp. NZ.

Bernays E.A.
SOME EVOLUTIONARY ASPECTS OF THE INSECT-HOST PLANT RELATIONSHIP 1976, 15pp, UK.

Mathews A.J.
CHEMICAL METHODS OF WEED CONTROL (MAF bulletin 329) 1956, 100pp, NZ.

Hobbs G.A.
ALFALFA LEAFCUTTER BEES FOR POLLINATING ALFALFA IN WESTERN CANADA, 1978, 30pp, Can.

Swales J.E.
COMMERCIAL APPLE GROWING, 1978, 127pp, Can.

Dedio W & Hoes J.A.
SUNFLOWER SEED CROPS, 1980, 31pp, Can.

Min. Ag. Fish, Food
REVIEW 1979 LUDDINGTON HORT. EXPERIMENTAL STATION, 56pp, UK.

Austr. Bkp. Ass.
PROGRAMMA 2nd. AUSTRALIAN AND INT. BEE CONGRESS. 1988.

DSIR
TREE LUCERNE WORKSHOP. 1982, 52pp, N.Z.

Tree Crop Ass.
PAPERS PRESENTED AT THE 8th ANNUAL CONFERENCE, 1982, 84pp, NZ.

Dept. Ag. Alberta
CATALOGUE OF SHELTERBELT TREES AND SHRUBS (an album with 88 colour photos with description and 6 colour prints).

A SERIES OF 12 COLOUR PHOTOS OF BEES FORAGING ON DIFFERENT FLOWERS.

48 PRINTS TAKEN FROM THE H.J. van PUFFELEN SLIDE COLLECTION.

We also received from:
MAF Quality Management, Ruakura
FEEDING DRUGS TO HONEY BEES TO CONTROL DISEASES — SOME OF THE ISSUES. Nov. 1990, 26pp, NZ.
A report from MAF with a view to the need to develop policies to control endemic diseases and action plans to respond to the arrival of one or more exotic bee diseases. Problems, cost benefits, and implications of drugs or chemicals are examined. It is meant as a basis for further study of these issues.
MAF was commissioned by the NBA Executive and the Industry Fund Trustees to compile this report.
NOTE: AS EVERY BEEKEEPER IN THIS COUNTRY SUFFERS LOSSES THROUGH BEE DISEASES AND IT IS APPARENT THAT THE PROBLEMS WILL BE COMPOUNDED WHEN (not if) SOME EXOTIC DISEASE OR PEST ARRIVES, EVERY ONE INVOLVED IN OUR INDUSTRY SHOULD TAKE NOTICE AND TAKE THE TIME TO STUDY THIS PAPER. NOW IS THE TIME TO THINK ABOUT ALL THE IMPLICATIONS, ONCE THE BOMB HAS BURST IT WILL BE ACTION STATIONS. TOO LATE THEN TO MAKE YOUR OPINION KNOWN. **John Heineman**

PESTICIDE REPORT

from Ian Berry

The safe use of pesticides toxic to bees is controlled under the Pesticides Regulations 1983. These Regulations make it an offence to use a pesticide contrary to any Bee Toxicity Warning on the label.

These Warning Statements and the relevant pesticides are listed below.

(a) TOXIC TO BEES. Spray must not contact plants in flower if they are likely to be visited by bees.

Pesticides
AZINPHOS-METHYL
CARBARYL
CHLORPYRIFOS
CYFLUTHRIN
LAMBDA-CYHALOTHRIN
CYPERMETHRIN
DELTAMETHRIN
DIAZINON (not pellets)
ESFENVALERATE
ETRIMFOS
FENITROTHION (not pellets)
FENVALERATE
MALDISON (not pellets)
METHIDATHION
METHIOCARB (not baits)
PARATHION-METHYL
PERMETHRIN
PHOSMET
PROTHIOFOS
PIRIMIPHOS-METHYL

(b) TOXIC TO BEES. Do not apply to strawberry or Autumn raspberry flowering plants except in the evening. Spray must not contact other plants in flower if they are likely to be visited by bees.

Pesticides
NALED

(c) TOXIC TO BEES. Do not apply to strawberry, Autumn raspberry or leguminous flowering plants except in the evening. Spray must not contact other plants in flower if they are likely to be visited by bees.

Pesticides
DICHLORVOS

(d) TOXIC TO BEES. Do not apply to Autumn raspberry or leguminous flowering plants except in the evening. Spray must not contact other plants in flower if they are likely to be visited by bees.

Pesticides
ENDOSULFAN

(e) TOXIC TO BEES. Spray must not contact plants in flower while bees are present.

Pesticides
BIOALLETHRIN
BIORESMETHRIN
D-PHENOTHRIN
PYRETHRUM
ROTENONE
TETRAMETHRIN

(f) TOXIC TO BEES. Spray must not contact plants from "X" days before flowering to petal fall if the plants are likely to be visited by bees.

Pesticides	Days
ACEPHATE	7
DEMETON-S-METHYL	7
DIMETHOATE	7
METHAMIDOPHOS	7
MEVINPHOS	3
OMETHOATE	7

Waikato Grower See Red

(Courtesy NZ Farmer)

FROM red-fleshed kiwifruit to the export potential of rosehips — Ken Nobbs does not confine his hobbies to his backyard.

The sparky 79-year-old has more projects in the pipeline than many people half his age have.

Mr Nobbs is Te Kauwhata's resident plant hybridist, nurseryman and historian. He operates his nursery and kiwifruit vines on a small block just out of Te Kauwhata and his history writing from his Aparangi home.

Mr Nobbs is a mine of information about anything from Maori history to the settlers' farming methods to growing roses on the roadside.

He may not be too good on the names of people he met yesterday but Mr Nobbs can tell you the date the first shipload of missionaries arrived in New Zealand or when the first two cows, eight sheep and a bull landed on these shores.

But it was not Ken Nobbs' wealth of historical information that I went to see him about.

It was this business about the oddly-coloured kiwifruit and the export potential of rosehips.

Ken Nobbs with a bowl of rosehips collected from the Arthur Hillier rose plant he is holding.

"I've got a great respect for bees," says Mr Nobbs. "Wonderful things."

Bees and pollen were, of course, the key factors in his accidental discovery of red-fleshed kiwifruit.

A cross between two Actinidia species, the arguta and the melanandra, resulted in a hybrid which Mr Nobbs planted — not realising there was anything unusual about it.

"The first one to flower was on November 1 with only seven buds. They were just green and I hadn't a clue what would happen. Then one of them started to take on a red bloom."

Eventually the other six followed suit.

The skin of the fruit is a colour known as "greyed red" — a kind of brick brown. The inside is quite a bright orange-red.

Mr Nobbs had only the seven fruit last season but now he has 12 plants and hopes to see many more in future years.

A representative of the Kiwifruit Marketing Board has been to see him but the board has yet to make a "reasonable offer".

Mr Nobbs says the fruit does not have the same shelf-life as the Hayward variety but they tasted good, with a Brix reading of 20.3.

He feels thay have a lot of potential as a novelty vine.

Another of Mr Nobbs' pet projects is rosehips.

Rosehips are the berry-like fruit which form on roses when they are not flowering.

He says the idea came to him after reading in a magazine about Chilean people harvesting their wild roses. The rosehips were being used to make teas as well as cosmetic moisturising and "wrinkle reducing" creams and oil.

Mr Nobbs says Department of Scientific and Industrial Research analyses show that rosehips from certain breeds of roses contain massive amounts of vitamin C — many times more than in oranges.

For instance, Arthur Hillier rosehips give an average of between 1700 and 2200mg of Vitamin C per 100g of fruit weight. A fully grown plant will give half a bucket of smooth red hips.

Mr Nobbs says oranges contain about 40mg.

Mr Nobbs keeps a supply of hips in the freezer especially in the winter when colds threaten.

"One of the advantages of such a natural source of Vitamin C is that other minerals and vitamins are derived from the rosehips," he says.

A species of rose would have to be developed which was easy to harvest mechanically.

"We could make millions of dollars a year by exporting them to Europe and America," he says.

The hips have very high ph levels which means they do not upset human skin which has similar levels.

A Christchurch company currently makes rosehips into tea but Mr Nobbs says another way to sell the rosehips was by extracting the essential oils and selling rosehip oil.

One of Mr Nobbs' more spectacular dreams is to have the nation's highway roadsides lined with rose bushes.

Already his dream has partially come true in Te Kauwhata, where, with the support of the local council, he has planted a kilometre of the main road linking Te Kauwhata to State Highway One.

As for the rest of the country — well Mr Nobbs is trying to sell the idea to the National Roads Board with little positive feedback at this stage.

He reckons planting the roses would be a good job for the nation's unemployed people.

PESTICIDE REPORT (Concluded)

OXAMYL (not pellets)	10
PHOSPHAMIDON	7
PYRAZOPHOS	3
THIOMETON	7

(g) TOXIC TO BEES. Do not apply to Strawberry or Autumn raspberry plants in flower except in the evening. Spray must not contact other plants from "X" days before flowering to petal fall if the plants are likely to be visited by bees.

Pesticides	**Days**
METHOMYL	10

(h) TOXIC TO BEES. Spray must not contact plants in flower if they are likely to be visited by bees except in the evening when the bees have stopped working.

Pesticides

PIRIMICARB

(i) TOXIC TO BEES. Do not lay baits within 400 metres of beehives.

Pesticides

SODIUM FLUOROACETATE (paste only)

Some people have a way with them

By Ham Maxwell

Being a beekeeper is not all beer and skittles, despite the fact that my mate Fred and I do our best in regard to the beer part of things. That the skittles part seems constantly to emerge to bowl me over is an undeniable fact, and that without Fred around, I would at times be in a pretty pickle.

The time that I was asked to go to the other side of town and collect some bees, for instance, is typical. Being new to beekeeping, and anxious to have more bees, the call, when it came, seemed to offer the chance to start up a new hive. So off I went in high hopes. Arrival saw the house owner anxious to have the bees removed from his roof. They had been there for a few weeks but with the onset of summer were making a nuisance of themselves by gathering water from the sauna and spa room. Inspection showed the bees were indeed well set up in the roof, accessing the hive through a hole in the barg board. The shallow pitch of the roof meant that access from inside was not possible. Removal of the roof tiles was the only way to get to them. A simple enough job on the face of it.

The owner was not happy that the roof would need to be lifted, and could not understand why the hive could not be got at from inside the roof. So I agreed to try, and that was my undoing. Manhole access into the roof was through the top of a wardrobe: one of the silliest places one could imagine. Having to clear out the clothes hanging there was soon done,despite his wife's niggles about the way he was handling her best frocks .

Taking a wander lamp with me into the roof cavity, I started the crawl over the joists to the hive and, sure enough, whilst I could see the comb section dangling from the rafters, no way was it possible to physically reach it. As it was I had been flat on my belly from the moment of leaving the manhole. So backtracking to the manhole and exiting, I explained to the householder the situation. Now either he was deaf or blind, or both, but no way would he accept that access from within the roof was not possible. So I phoned Fred. He arrived, looked at the situation, and said it was too late in the day to start collecting the bees anyway, would tomorrow be ok? It transpired the householder was going out the next morning, all morning, but his son would be home.

Next day saw us around at the house-bright and early, early enough to wave farewell to the owner. As soon as he vanished, Fred was up the ladder, and removing the roof tiles in rapid order. Being in the trade, Fred has a certain expertise in such matters, and in short order had exposed the hive. In the interim I had been sent up into the roof with the wander lamp, with the son of the house holding the ladder steady under the manhole.

I watched Fred cut the comb from the rafter, transfer the comb to a box he had with him, then begin to close up the roof. With the fitting of the last tile, I came down from the roof, carefully holding a closed box I had taken up with me. Whilst the son of the house was putting their ladder away, we quickly disposed of my box into the van and placed Fred's identical box on top of a ladder, adjacent to the entry point for the hive.

It was still there to attract the field bees when the householder arrived home. The son described how I went up into the roof and came down with a box of bees, via the manhole, whilst the other man was banging on the outside of the roof to drive the bees into the box. "There, I told you it could be done without lifting the roof" said the householder. Fred agreed with him, and suggested that it was hot work, thirsty work at that, in today's climate, and we would need to refresh ourselves on the way home. It worked, we left behind not only a satisfied householder, but a few empties as well. Those bees subsequently turned into a good production hive at Murphy's yard. Fred seems to have an uncanny ability to turn situations around.

Like the time when I ran foul of the local council. It seems that someone objected to my having some hives on the edge of town. We were never told why, only told that the hives had to be moved, and soon at that. The land owner was annoyed, as the hives had been put there in the first place to help with the clover pollination in the paddocks. So we resigned ourselves to moving the hives. Then along came Fred, as requested, to use his truck to move the hives. Looking over the site, he asked about the old barn, what it was used for and how long it was intended to remain there. In the meantime, at sunset, we got the hives ready for moving to a new site. Fred disappeared into the barn for a while, and we heard the sound of a saw. He then emerged, and by this stage the sun had all but set. Instead of loading the hives on to the truck, he produced a porter's barrow, and wheeled the hives into the barn. He then proceeded to deposit each hive against the wall of the barn, with the hive entrance abutting a small slot in the wall. He released the block from each hive entrance and we came out from the barn, carefully closing and barring the door.

On our return to the truck, he switched on the spotlights, and proceeded to load some empty supers, seemingly to make an awful lot of noise in the process, particularly the curses about having to move hives in the middle of the night. Loading completed, we drove off into the darkness.

Daylight showed no visible evidence of any hives on the property, and we waited with baited breath for the repetition of any complaint about the presence of bees. None have been forthcoming. Naturally I do not don my beekeeping gear until I am inside the barn when the hives need to be worked. The bonus is that now the hives are not subject to the weather. The truck is taken right into the barn when supers need to be moved, and is covered by tarpaulin when going to and from the barn. The land owner tells me his clover is doing very well.

Fred is not the garrulous type, in fact at times he is downright reticent about about his comings and goings. So when he disappeared for a couple of days, we were none the wiser on his return as to the reason for his absence. Nor did we ask. All in good time is the way to handle Fred, and it helps to lubricate his throat from time to time. Eventually, after a throat lubrication session, he happened to mention he had to help out a mate of his over at an adjacent town. Seems the local narks had seen fit to dob his mate in to the local health inspector, claiming that he was packing honey in his kitchen instead of a separate honey house designated for the purpose. Now this mate had done Fred a few good turns over the years, so now was the time to return the favours. It so happened that another mate of Fred was into food packaging, and had all the correct licences to do

what was necessary. He was sympathetic when Fred approached him, possibly because it was Fred who was the only mate to pitch in and help rebuild his plant after a fire.

In no time flat, Fred moved all his beekeeping mate's honey processing gear into a small roof at one end of the food processing premises. Extractor, wax bin, filters, filling machine were set up, and the cartons of honey pots finished off the charade. A quick extraction of a few frames completed the set-up. Naturally the beekeeper wanted to co-operate with the authorities, and would be pleased to show the inspector his honey packing plant. The inspection was duly made, and the licence covering the premises inspected. It appeared that a mistake had been made, as it was stated by persons unknown that the address appearing on the honey label was assumed to be the address at which the honey was packed. Of course the honey label must contain the full postal address of the packer, not necessarily the address of the place at which the honey is packed.

Once set up, the installation stayed, and a rental agreement was reached between Fred's mates. He had recently been over to review the situation, and was pleased to find things going well between his two mates.

It takes all kinds to make up this world of ours, and Fred is no exception. Seemingly slow of intellect, people often mistake the acumen lurking beneath his furrowed brow. That battered old fedora he always wears doesn't help much either, often hiding the eyes that at times can seemingly bore right through to bare your soul.

To Fred it matters not what people chose to think about him, but break your word to him on a deal and you will be playing with fire. This was never more evident than when he did a deal with a packer to supply a quantity of honey at the start of the new season. The season started off well enough, but a drought rapidly affected the honey flow, limiting the take off from the hives.

Fred told the packer of this factor early in the piece, and was assured that they would take what he could supply. Duly delivered, the honey disappeared in to the plant for processing. Payment for product was to be on the 20th of the month following delivery.

Payment day came and went, with nothing heard from the packer. So too did the 20th of the following month. Fred decided to ask some questions. After three days his calls remained unanswered, so he cleaned himself up and went over to the plant for a visit. The foreman at the plant was polite, but did not handle the office section of the operation, and the boss man was away on a trip, and would not be returning before the end of the month. So Fred had to wait.

His next visit revealed the boss man was back home, but out of town for the day, could he come back tomorrow? Yes, his concern about non-payment would be conveyed to the top man as soon as he returned to the office. Next day it transpired that an emergency in the family necessitated the head man having to leave for a few days, yes, he will definitely contact you on his return.

This debacle went on intermittently for the next few months, and it was costing Fred dearly to travel 90 ms each way, only to find one emergency after another meant another broken appointment.

Now Fred has a few friends around the country, and seemingly most owe him a favour or two, so he carefully studied the situation, before realising that the garage in town would probably service the packer's car. Charlie was an old mate, and Charlie owned the garage, so it was not so surprising that a 'phone call was received one day from Charlie. He had to get in some parts for a vehicle being serviced in his garage, and would Fred oblige him by collecting the parts and delivering them to him? Always willing to help an old mate, Fred duly delivered the parts. He then proceeded out to the packing house, knowing full well the owner was in residence, as his car was being serviced in the garage.

Bingo! Fred arrived in time to meet the owner coming out of his office. Without further ado Fred took him by the elbow and turned him round, helping him to return to the office. Stated in simple terms, Fred wanted his money, now! A fillibuster in the American Senate would have nothing on the performance turned on by the packer. In short, Fred gathered that his non fulfilment of a stated amount of honey was the reason for non-payment. All legally binding should he like to contest it in court. Not being one for reading the small type, Fred realised that he was stalemated. Until he was able to fulfil the contract, this creep was able to use his money by withholding payment.

Paying bills in the meantime would not be easy, but he would manage somehow, now where to get some honey? His own stock was low, nowhere near enough to complete the contract. Being resourceful is Fred's long shot. A few 'phone calls saw him able to meet the quote imposed, and he duly delivered. The 20th of the following month came and went, still no payment. This called for a concerted attack. One of the things the packer had to rely on was the local trade group in the town, any machine malfunction, power failure, water problem, in fact any catastrophy, major or minor, meant calling in a tradesman.

It started with the packing machine. A minor malfunction, certainly, in that the honey pots were intermittent in transport, and occasionally the machine would miss fitting a honey pot in place. Jerry, the technician was away on another job out of town. Be back in a couple of days, said his wife. Then suddenly the steam generator gave up the ghost and Sam the engineer was at a loss to figure out the reason. The fault was simple enough, but try as he may, there was no way that machine could make steam. Of course the honey flow ceased and the plant ground to a halt. Geoff the electrician was called in to assist with the steam generator, but his efforts were in vain, the steam generator checked out ok, but refused to belch forth the required product. In the middle of all this turmoil the local health inspector called in, they had a complaint of a foreign body in a honey pot, namely a mouse dropping, and he would require to carry out a thorough inspection. Pandemonium reigned supreme, machinery in pieces all over the place did not make for neatness and tidyness. The fact that honey had been spilling from the filling machine meant a somewhat untidy spectacle in front of the health inspector.

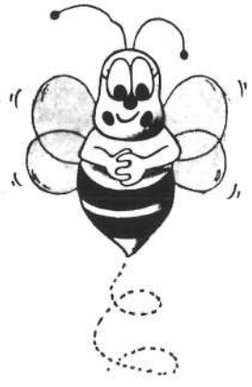
Then along came Fred, long tall Fred. It transpired he was known well to the tradesmen, and they conveyed their troubles to him. Could he help?
Now Fred is not one to miss an opportunity. He casually sauntered in to the packing house and looked things over, then asked for the owner. Out from the office shot a worried looking individual, not at all pleased when he saw who the visitor was. Fred opined he could be of help, but with so much outstanding between them he doubted he would ever be paid for his efforts. Not so assured the packer, payment would be immediate, cash on the spot. In fact he was just in the middle of settling that account of Fred's, the one which had been mislaid and had just resurfaced. With that he disappeared back into the office, emerging a few minutes later with a wad in his hand. He hoped that would settle the matter between them.

Fred sauntered back into the factory, whistling, and suddenly Sam called out to him that they had found the reason for the failure of the steam generator, but it would be a couple of hours before they would have it up and running. At that point Jerry appeared on the

scene and began to look over the packing plant for any malfunction. His out of town trip did not eventuate, as the firm with the breakdown phoned that the plant was operating again. Thank goodness the phone in his truck had saved a wasted trip of over 200 Kms. Getting down to work he found a piece of cardboard had caught up in the machine, and in flapping occasionally covered up the photo-sensor, causing the machine to believe that a honey pot was already in place.

Of course the Health Inspector found little to substantiate the complaint received, but nevertheless was unhappy with the general standard of cleanliness he found, and issued a clean-up notice, with a reinspection to be undertaken in seven days. And yes, in this day of user pays, the packer would be charged the usual inspection fees. Good morning.

Fred's fee was added to the overall costs, of course, but he dispensed it later in the day in the form of a few jugs of draught ale down at the club. By coincidence the group consisted of Sam, Jerry, Geoff, Fred, and I never did get the name of the other bloke, the one someone said worked in the field of public health.



ON GATES

A Dissertation from George Nichols

There is a special New Zealand gate called the Taranaki Gate. This is a complex floppy mixture of wire and wood which has two varieties:

1. The impossible-to-open variety strung up by the local muscle man until you can play a tune on it; impossible to close without breaking your hire tool.
2. The completely floppy variety which falls down when you approach it or falls down after you have left, leading to a certain coolness with the farmer who makes remarks about removing your bees. These are six boxes high and the boy is on holiday so you grovel.

In the Hokianga we are not as other people. Apart from our time scale, which starts two hours after that of lesser mortals down the line, we have the Hokianga Gate. The Hokianga Gate is an excellent heavily constructed gate but when the original specifications were sent to the manufacturer the designer forgot to specify hinges. In consequence the manufacturer used his initiative and sells three models: one with no hinges, one with a top hinge, and one with a bottom hinge. The Hokianga farmer is a man of great resourcefulness and erects his hingeless gate with the aid of binder twine, rotting rope, and no. 8 wire. Binder twine breaks quite musically, rotting rope dies in despair and the no. 8 wire slides down the post where it ties itself in knots.

The model with the hinge at the top is my particular horror but is considered the ultimate in luxury by the farmer as it needs no bottom support. When I open it the gate dog twists in the rotten wood of the post and the hinge and gate dog part company. I am not sure which part of the gate to hold when trying to re-erect. The middle is the obvious first choice so I twist the gate dog into the vertical position, retreat to the gate centre, breathe heavily before 163 cm Man Mountain Nichols (5 ft. 4 in. to the ignorant) heaves it into the vertical position just brushing the gate dog which collapses. Pause for meditation and rude words ("Oh bother!").

Second try is at the hinge end where the gate dog is controlled manually (by hand). Here the gate weights twice as much (every gate has its moments. Mathematical joke) and I can't lift it and steer at the same time. Pause for meditation and deep breathing exercises. I solve the problem by finding a piece of wood to prop up the far end of the gate while I align things at the hinge end and the job is done.

The model with one hinge at the bottom is supported in a vaguely upright position by the chain and gate catch at the other end. This gate assumes standard position, flat on the deck, when the catch is released and the gate dog twists into the horizontal position. The gate post this time is good and solid so the dog is now jammed rock hard. I heave the gate round, drive the tractor and trailer through, heave the gate back, insert the hinge pin into the dog, apply the principle of moments (as in joke?), work my way carefully holding the top bar of the gate until I can reach the gate catch and the job is done. This is repeated on the way home.

When I make my fortune beekeeping (joke number two) I shall present all my farming mates with a full set of complete gates professionally erected.

ENVIRONMENT

Cleaning up Diesel Soot on the Move

The major problem of disposing of accumulated soot in vehicle diesel engines while they are on the move is claimed to have been solved by Britain's Webasto company.

While filters have been in use for some time and can now reduce soot emissions by 90 per cent, the disposal of the accumulated soot during a vehicle's journey has remained a challenge for the industry.

Now, Webasto says its new soot converter unit can remove the health damaging soot particles from exhaust emissions of modern diesels by adding a very small amount of diesel fuel to the engine exhaust gases. These are then ignited and heated to a temperature which guarantees reliable ignition and combustion of the soot accumulated in the filter.

The process is not continuous and only takes place when the built-in sensors detect that the filter is loaded with soot. Combustion, which raises the gas temperature to 700°C, is then initiated at the correct point.

The complete cycle of the system is fully automatic, takes about five minutes and cannot be detected by either drivers or pedestrians. As in-built status monitoring system gives rapid detection of any malfunctions or disturbances.

Webasto says the soot converter is compatible with all particle filters on the market and with all commercial vehicle diesel engines.

A NEW WASP TRAP

By Michael Burgess

Above: *Len at his computer.*

So many things come out of back yard bicycle sheds where a couple of fellows over a beer, and perhaps even dodging the washing up in the house, toss an idea back and forth with a 'what if ...!'

That is not to say that either Bob Oliver or Len Wood were dodging the washing up but the Oliver Wasp and Pest Trap certainly came out of a few 'what ifs' between them.

Both worked together at Electrolux some years ago. During a casual meeting since Bob touched on a problem: wasps. It seems they were attacking not only his apples in his Miramar, Wellington, garden but also his grapes.

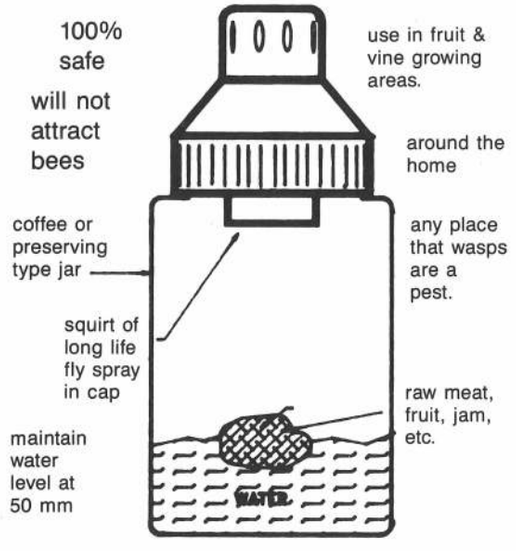
That's right, Hortense, grapes **do** grow in Wellington despite what some people in other parts of New Zealand may think.

Anyway, Bob had seen something years ago but it seemed that particular thing was no longer available. Now it so happens that Len is a toolmaker with a pile of gear in his basement so out came the pencil and pad. From there the idea went on Len's computer. After some months of trial and error the tool for the Oliver Wasp and Fly Trap was produced.

The trap, which costs around five dollars, is now being produced by an Upper Hutt firm. It is a simple device which screws on any coffee or preserving jar. Add about 40mm of water to the jar, a squirt of long-life insect killer, some bait to attract the wasps, then all you need do is empty when full. Simple isn't it? Like most things very simple when someone has figured it out.

OLIVER WASP&FLY TRAP

environment friendly



Made in N.Z.

Agents:
Versatile Marketing
23, The Cunics.
Lower Hutt
phone 04 675-734.
Manufactured by: Len Wood, Tool & Die Maker

Below: *Bob (left) and Len with the tool in Len's workshop.*

INSHALLAH ANDREW MATHESON

From Murray Reid, National Manager Apiculture, MAF, Hamilton

Andrew Matheson

Andrew has been appointed the new director of the International Bee Research Association (IBRA) based in Wales and takes up his position in January 1991.

Andrew joined MAF in 1978 as an apiculture adviser and consultant and has worked in Hamilton, Nelson and Tauranga. There's a saying that no person is indispensable but some are more indispensable than others and Andrew's skills and bon ami will be sorely missed in the apiculture business unit.

The skills Andrew developed in MAF were exactly what the IBRA were looking for which is a credit to the MAF and the beekeeping industry that we work with. The IBRA provides a comprehensive information service, on all aspects of beekeeping, to a wide client base that includes beekeepers, agriculturists, government departments, foresters, aid agencies and so on.

At its headquarters in Cardiff, IBRA has a permanent staff experienced in science, information and advisory services, and publishing. They're supported by a network of regional representatives in some 50 countries, and by experienced scientists who make up the association's government council.

IBRA publishes three scientific journals as well as texts, visual aids, bibliographies and multilingual dictionaries. The association organises conferences and seminars and operates a library service. Its central library is probably the biggest apiculture library in the world, with over 50,000 items, and is supported by branch libraries in four continents.

In his 13 years working with beekeepers Andrew will long be remembered for his many articles especially in the 'NZ Beekeeper', for his teaching at Polytechnics, Flock House and Telford, for his text book 'Practical Beekeeping in New Zealand', for Aglinks and for his editorship of the industry monthly newsletter 'Buzzwords'. He has also loyally attended numerous branch meetings, conferences, field days and industry planning workshops.

Before Andrew left we got to reminiscing about his time with MAF. 'You know', he said, 'I've seen a lot of changes in the past 13 years. I've seen the advent of kiwifruit pollination associations, pollination standards and audits, user pays, management by objectives work plans and mission statements, a reduction in full time apiculture officers from 11 to 4, Trust funds, MAF being sued by a beekeeper, Commodities Levy Act, rise and fall of regional development schemes, the beekeeping diploma and apiculture unit at Telford, the first off-shore conference, the establishment of chalkbrood to list just a few! I only wish I had time to write about them all as these are part of our beekeeping history.'

We had many good times in MAF too and while Andrew's sense of perfection helped me a lot within the MAF business it gave us some interesting moments when dining out. Andrew loved to choose the restaurant and became known as 'Mr send it back'!

TO A FRIEND

Standards at restaurants had to be met
Gourmet images must be kept
Nothing was safe, nothing sacrosanct
He'd send it back, even the kitchen sink

Underdone meat or red corky wine
Le cuisine must be haute, not just fine
Everything perfection or back it would go
Even the wine at a BYO

Now you've left how will we cope
Can we update manuals and find things that rope
No more duck l'orange and camembert
It's back to pizzas, pies and organic yoghurt

You've fitted a lot into the past 13 years
Hard work, good times, laughter and tears
For Aglinks, 'The Book' and pollination audits
You've earnt dollars, curses and some plaudits

Thanks for the support and the good times
Thanks for the whit and erudite lines
Thanks for the memories and the fun
All the very best and Inshallah, old son.

WHAT PRICE ETHICS

from Anon.

Consider the recent price increase in honey at the supermarket. In this family the connotation of "retired" means that one has the privilege of doing the shopping whilst the other party is hard at work to keep us in the style to which we are accustomed. As part of that privilege, by keeping a watch on the supermarket shelves, a readily discernable increase has been apparent in the price of honey over these last four weeks.

Where previously the price of a well known brand of clover honey had been as low as $1.58 for 500gms, that same hone is now $2.48. Yes, it's the same honey, readily identifiable by the label and the stacking method used on the shelf.

Now tell me that new stocks have arrived at the store, accounting for the price differential, tell me that all "old" stock would be sold at the "old" price, and tell me that throughput is high, minimising any transition from one shipment to the other. Now tell me how the centralised computer system used at the supermarket is able to distinguish by the bar code which is old and new stock.

If, as I suspect, alteration of the pricing being centralised means that all "old" stock is sold at "new" prices when the computer is changed, then the store is being dishonest with its customers. Aha — I hear a voice within me saying that this is not dishonest — no, merely a temporary abberation which exists when price changes occur. At worst a shabby practice, but unavoidable under the methods used. Of course the

Continued on page 30

Tigers take grisly toll in the jungle: NZ beekeepers have it good

from NZPA via Ron Mossop

CANNING TOWN (India) — Every year, man-eating tigers kill at least 150 of the honey collectors and fisherman whose livelihood comes from deep within the Sunderbans forest reserve, officials here say.

No attempt has been made to drive the wild cats out of the 2585 square km of river delta mangrove swamp in the Bay of Bengal because they are protected by India's decade-old Project Tiger.

And villagers in the area will not give up what they say is their only source of income.

Project Tiger officials here say attempts to reduce the death toll by introducing steel safety helmets and to deter the man-eaters using electrically-charged clay dummies of humans have all failed.

"Killings will continue as long as people enter the core area of the forest," said Arin Ghosh, a senior official of Project Tiger in Sunderbans.

Mr Ghosh blamed the victims for the high death toll, saying they ignored clearly demarcated areas for fishing and honey collecting.

He said most of the killings go unreported because villagers fear they will be prosecuted for entering the reserve's "danger zone." Fines for entering the zone can reach 5000 rupees ($NZ521), a sum well beyond their means.

The villagers in turn blame the Government.

"The Government makes a profit selling bees wax, honey and fish but doesn't bother to protect us," one of the villagers said.

"There are pirates and crocodiles in the river, tigers and snakes in the forest and money lenders in the villages. We are the ones who always suffer," Prahipraj Lodh, 46, said here in the small town that houses Project Tiger.

Lodh, a fisherman, said most of the people who work in the area know the government regulations about entering the forest, but have no alternative.

"There are no beehives in the areas set aside for collecting honey and no fish in the portion of the river marked for fishing. Naturally we violate the rules," he said.

"We are poor, we need the money," said Uttam, a honey collector. "Where should we go, to Calcutta to beg like refugees?"

The area's high salinity, due to tidal rivers which flow into the Bay of Bengal, means no food crops can be grown, leaving the villagers dependent on the forest for their livelihood.

Local residents estimate that more than 1000 people have been killed by tigers in the past eight years and the relatives of most of them have missed out on the 10,000 rupees ($NZ918) compensation because they were attacked in the prohibited zone.

"It seems the government loves animals more than men. We just keep our fingers crossed when our men leave for the jungle because it is sure that when they come back, someone will be missing," said Ratnadevi, 47, whose husband was killed by a man-eater five years ago.

Last week Phulkumari, the newest widow, was mourning the loss of her husband Manik, a honey collector, whose body was left half eaten in the Sunderbans.

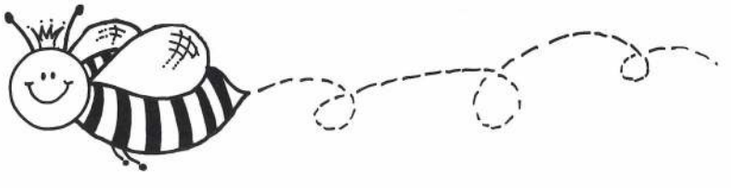
What Price Ethics (Concluded)

reverse applies, with a reduction in pricing the store suffers a loss, customers a gain, so by applying the swings and roundabout principle, things even out. So when did you last hear of price reductions being permanent? Is any price permanent?

Ethics is a promoted business practice, so we are told; but it appears to have flown out the window with the introduction of the centralised computer pricing system. Does anyone calculate the excess profit gained by the supermarket, look back along the supply chain and distribute a portion of this profit to the suppliers? That I would seriously doubt. Arguments would be raised in regard to the costings of such an exercise, the feasability in application, and the naiveness of the proposer. Yet we, as primary suppliers, are subjected to this intolerable business practice in the commercial promotion of our product.

One may meet with the proposition that once out of our hands, there is no legal or moral obligation for us to concern ourselves with the product, honey. So be it. This is the point at which we, as primary producers, must make the decision to sell and be dammed as to what happens next, or to develop our own marketing methods and control through to the point of sale. This is big "bikkies" on a national scale, and the fragmentation of the supply chain appears to make it easy for us to be taken advantage of.

With our society apparently based on the glorification of the moneymaker, are we perhaps envious when we see increases in profit when honey is sold to the final consumer? Yes, I know I am. I certainly would have liked to have benefitted from the recent increases. I would also have liked to see the rest of the honey industry benefit. But again, is it really our concern once we have sold our product? Without a recognised honey marketing organisation, working in the interests of the beekeeper, we never will have any say or control over the marketing of our product. Like it or lump it is an old adage, and like honey when left too long, lump it is the end result.



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