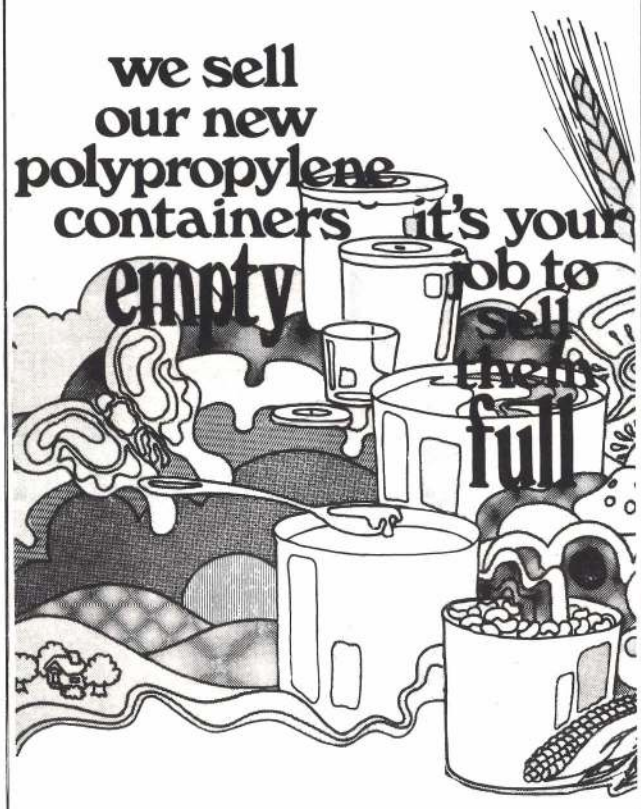
THE NEW ZEALAND beekeeper

SEPTEMBER 1980



The polypropylene used in our containers has the distinctive quality of being able to withstand both boiling and freezing temperatures.

Because they can be sterilised after their initial use, our containers can be re-used in the home, the workship, the factory etc.

With no seams or joints plus tight fitting polythene snap-on lids our containers provide hygenic packaging in eye appealing colours which will present your honey to its best advantage.

To give you, the customer, a choice, we produce a range of four capacities which are proportional to each other, 250 gram, 500 gram, 1 250 gram and 2 000 gram.

The colours available immediately ex stock are Red, Blue, Green, Yellow, Orange, White. Special colours are available on request. We would be pleased to send on request a sample range free of charge.

A silk screen service is available at a small extra cost. If you have a use for our containers please contact our sales manager today.

Auckland Tool & Gauge Co. Ltd.

Hillside Road, Takapuna, Auckland 10, N.Z.
Phone: 449-398. Telegraphic & Cable:-
"SPARKMOLD", Auckland.

Comvita

Propolis Wanted
We will buy all your hive scrapings at $10 for every kg of clean Propolis they yield. Please send a sample for evaluation to:

Comvita Laboratories Ltd., Box 225, Te Puke.

Increase hive revenue this season **COLLECT POLLEN.**
We will buy all varieties in any quantity from you at top market prices.
Write direct for further information to:

Comvita Laboratories Ltd., P.O. Box 225, Te Puke.

Comvita Laboratories Ltd

CABLE: COMVITA,
PHONE 31-167 TE PUKE.

OLD COACH ROAD,
PAENGAROA,
P.O. BOX 225, TE PUKE.

Don Gibbons

CROWN QUEENS

ARE AVAILABLE FROM OCTOBER TO APRIL

This is a line of Italian Queens which has proved its success with both commercial and hobbyist bee-keepers for more than 30 years.

NZ prices:

1 – 10 = $5.00 each
11 – 20 = $4.70 each
21 – 100 = $4.20 each
over 100 = $3.90 each

Dispatch advice telegram $1

Order early and avoid disappointment. Prices subject to change without notice. Terms; Cash with order, except by arrangement from:

Don Gibbons,
P.O. Box 54,
Waipu
NORTH AUCKLAND

ISSN 0110 – 6325

THE NEW ZEALAND BEEKEEPER

Registered for transmission by post as a magazine.

September 1980
Vol. 41, No. 3

Publishers
The N.Z. Beekeeper is published by the Agricultural Press Co. Ltd, Box 594, Masterton, on behalf of the National Beekeepers' Association of N.Z. (Inc.), Box 4048, Wellington, in the first week of March, June, September and December each year.

Editorial: Trevor Walton
Advertising: Alison Woolley
Address:
Box 594, Masterton, phone 81039
Deadlines:
Second Monday of the month preceding publication.

Circulation
All enquiries relating to the distribution of the N.Z. Beekeeper should be directed to Mrs Jean James, National Beekeepers' Association, Box 4048, Wellington.
Printer: MGV Ltd, Hutt Road, Kaiwharawhara, Wellington.

Index

EDITORIAL

Government's benign hand?

by Simon Mill

The main and burning issue of the present "Beekeeper" journal remains unquenched.

Will the proposed co-op get its money cheaply and regardless of the industry's own doubts, or will the government easy-oar and wait until the arbitrator has decided how the assets of the HMA should be apportioned?

After the conference in Tauranga it seemed that the order of progression was to first establish the ownership of the HMA assets, and then allow those sections that wanted to, use their entitlement; be it co-op, industry research, buffer account, or whatever.

After much compromise beekeepers have taken their first positive step to rationalisation, by agreeing on an arbitrator acceptable to all factions.

But there appears to be unseemly haste to get the co-op away to a flying start with cheap industry money before the arbitrator has had any show of making a decision.

As Mr Percy Berry has said, there seem to be no urgent matters requiring immediate decisions, and although one can understand the desire of the steering committee of the proposed co-op to get viable with one per cent money (and less than cynics would say who couldn't?), it is disturbing to see the government getting in on the act; and via the under secretary of agriculture, Mr Rob Talbot, looking as though it will impose the formation of the South Island Co-op with HMA money.

The government would be foolish to jeopardise such long sought cohesion by appearing to favour one section above others, before the asset position has been determined.

Let us all hope that the last issue of the "Beekeeper" for 1980 will carry tidings of an amicable decision about the HMA assets, made from within the industry, and not from a bigger hive.

NATIONAL BEEKEEPERS' ASSOCIATION

OF N.Z. INCORPORATED

President:
P. Marshall, 1 Bracken St., Napier
Phone 58-348 (home)
58-137 (business)

Vice-President:
Michael Stuckey, P.O. Box 35233, Browns Bay, Auckland.
Phone 4781-284 (home)
4781-133 (business)

Executive:
S.J. Lyttle, No.2 R.D., Geraldine. Phone 1189.

M.D. Cloake, Fairview R.D., Timaru.

Ian Berry, P.O. Box 16, Havelock North. Phone 775-400 and 777-300 (business) and 778-772 (home).

Tony Clissold, No.5 R.D., Gore. Phone 866, Willowbank.

General Secretary:
David Dobson, Level 14, Pastoral House, P.O. Box 4048, Wellington. Phone 721-541.

Hon. Librarian:
M.J. Heineman, Box 112, Milton, Otago. Phone 4613 (home)
4614 (business).

BRANCHES

FAR NORTH
President: Mr W.G. Macpherson, R.D.3, Kaitaia.
Secretary: Mrs W. Macpherson, R.D.3, Kaitaia.

NORTHLAND
President: Mr P.D. Pearson, Hilton Road, R.D.2, Whangarei. Secretary: Mr G. Richards, 27 Meadowpark Crescent, Whangarei.

WAIKATO
President: Mr B.E. Mitchell, 25 Saxby Rd, Hamilton. Secretary: Mr T. Lorimer, 353 Cobham Dr, Hamilton.

BAY OF PLENTY
President: Mr A.B. Edwards, R.D.3, Tauranga. Secretary: Mr B.M Stanley, Golden Grove Apiaries, Fosters Road, R.D.1, Whakatane.

HAWKES BAY
President: Mr P.W.T. Ashcroft, c/- Ashcrofts Honey House, 79 Te Mata Rd, Havelock North. Secretary: Mr K.A. Leadley, 605 Williams Street, Hastings.

CENTRAL/SOUTH HAWKES BAY
President: Mr D.L. Ward, Guy Street, Dannevirke. Secretary: Mr J. Ward, Sydney Terrace, Takapau.

OTAGO
President: Mr J.H. Garroway, 28 Main Rd, Ocean View, Dunedin. Secretary: Mr N. Walker, 2 R.D., Milton.

SOUTHLAND
President: Mr A. Ward, 10 Beattie Street, Gore.
Secretary: Mr M.W. Ballantyne, Woodlands.

SOUTH WESTERN DISTRICTS
President: Mr T.D. Rowe, P.O. Box 18, Eltham. Secretary: Mr K. Rodie, 14 York Street, Feilding.

NELSON
President: Mr R. Ellis, 31c Doran St, Richmond. Secretary: Mr F.A. Galea, 263 Ranzau Rd, Hope, Nelson.

WEST COAST
President: Mr A. Braid, Franz Joseph Glacier, Secretary: Mr R.J. Buchanan, 471 Main South Road, Paroa, Westland.

CANTERBURY
President: Mr A. Hill, 3 Queen Street, Rangiora. Secretary: Mr A.J. Scott, 120 Main South Road, Christchurch.

SOUTH CANTERBURY
President: Mr S.F. Robins, Manse Rd, Pleasant Point. Secretary: Mr N. Trezise, 69 College Road, Timaru.

NORTH OTAGO
President: Mr R.M. McCallum, Herbert, 8 O.R.D., Oamaru. Secretary: Mr G.E. Winslade, 1 H.R.D., Oamaru.

N.Z. BEEKEEPER ADVERTISING RATES

Commercial Rates (per insertion)

Full page $160 (4 insertions $120), Half page $90 (4 insertions $75), Quarter page $45 (4 insertions $40), 1/8 page $25. Special locations $30 extra. Colour $60 extra. Production charges will be made for all new advertisements where special production work is needed. Classifieds $5 a col/cm.

Beekeeper Rates

Advertising at these rates is available to registered beekeepers advertising products or services directly relating to their beekeeping enterprise only. In cases where the appropriate rate is in doubt, the editor's decision will be final.

Half page $65, Quarter page $35, 1/8 page $20, $3 col/cm. Production charges will be made for single insertions of a minimum of $5. (This does not apply to classified advertisements.) No deduction for contracts. Colour extra.

Subscriptions

The N.Z. Beekeeper is distributed free to all beekeepers owning more than 49 hives who, after paying their compulsory hive levy, automatically become members of the National Beekeepers' Association of New Zealand (Inc).

Beekeepers owning less than 50 hives, will pay an annual subscription of $9.00 which includes the cost of a subscription to the N.Z. Beekeeper.

STOP PRESS!
STOP PRESS!
STOP PRESS!

"THE BEEKEEPER" was held back until after a meeting at the 'big beehive' in Wellington on Monday, August 25.

The meeting had been called by the under secretary of agriculture, Rob Talbot, to try and get the proposed South Island Honey Co-operative into gear.

No decision was forthcoming from the meeting which ended about noon when Mr Talbot had to fly south for another engagement.

It appears that Mr Talbot is determined to break the deadlock between the board of the HMA (who following the dictates of the NBA AGM in Tauranga wish to determine the basis of asset realisation through an independent arbitrator first), and the steering committee of the proposed co-op (who want immediate access to one per cent funds from the HMA to launch the co-op).

The chairman of the HMA, Mr Percy Berry told "The Beekeeper" that he had impressed on Mr Talbot, before everyone at the meeting that the status of the funds of the HMA would be decided by an arbitrator acceptable to all sections of the industry, and *"... if the government forces concessions to any section of the industry before arbitration, then it seems almost certain that the validity of the government's action will be challenged through appropriate court action."*

The meeting adjourned to the NBA board room after Mr Talbot had left where a decision was made to appoint an arbitrator by all at the meeting.

His name and the terms of his reference will be announced during the NBA executive meeting on September 9 and 10, said Mr Paul Marshall, the NBA president.

Mr Don Hayman also pointed out that all interested parties will be able to make submissions to the arbitrator before he reaches his decision.

Helping our queen bees reach their full potential

Murray Reid, Apicultural Advisory Officer in Hamilton, defines the essence of good bee management in this article which is adapted from a paper presented to the MAF seminar in Tauranga in late July.

Beekeeping is big business these days, but it is a business that tends to be complicated. What with finance, taxation, machinery, marketing, exporting and so on. The production side can be complicated too, but does it really need to be so?

After all, bees have survived by themselves for millions of years and still survive in spite of what we do to them.

TO ME, successful and profitable beekeeping boils down to two very simple aspects; plenty of feed and young queens.

This implies, of course, that we also must have a good population of healthy worker bees and good brood combs so that the egg laying potential of the queen is not limited and that the bees are in a good nectar and pollen producing area.

We all appreciate the value of young queens from selected stock, in theory, if not in practice. Obviously the best re-queening programme is one that uses carefully selected and tested queens, and I would suggest that to be sure this is done to your satisfaction, you should be selecting and breeding from your own stock. However, I also believe that any young queen is better than an old selected queen and this year in the Waikato and Bay of Plenty, at least, the value of young queens was so obvious. They were the only hives you took any honey off.

I would love to go on about the proven value of autumn and spring nucs, but this is outside the scope of my topic. Rather let me concentrate on some of the background to what should happen in the hive being prepared for the flow. Some people would call this theory, but nothing could be further from the truth. It is the very heart of the practical side of successful commercial beekeeping.

What I have been asked to do is to discuss how we can assist our selected queens to show their true genetic potential. Some of the things we should do are so basic I feel silly mentioning them.

It stands to reason a starving colony will not be worth much, yet in the autumn of 1979 a commercial beekeeper purchased over 50 expensive queens, made up nucs, got his queens laying nicely and fed them well and wintered them down. Despite reminders from me that these nucs would need feeding again in early August, he did not get around to checking them until the end of September. The result – disaster. They were all dead or so far gone they were beyond repair.

This brings me back to my first prerequisite for commercial beekeeping – plenty of honey stores. It seems a little strange to me that in the Waikato we have people moving more and more to single brood nest wintering. Whereas in Southland the trend is to wintering hives three high.

In most of the Waikato we can get away with this system because of plentiful supplies of pollen. However, this season caught many beekeepers on the wrong foot. Pollen shortages showed up for the first time in many areas. I did not hear of one beekeeper who was prepared for this and had stored pollen on hand to feed either as a patty or in sugar syrup. Many beekeepers did not even recognise the effects of the shortage when it was staring them in the face.

Bees need a huge amount of good quality pollen with all the essential amino acids present: Pollen is essential for royal jelly production; royal jelly in one form or another is fed to the larvae and is also the main food source of the queen.

A good hive in one year will rear over 200 000 bees. On average, 125 mg of pollen is eaten by nurse bee's for every larva reared. This means our strong hive will need more than 25 kg of pollen a year.

Now, a full comb of pollen will be enough to rear 7 000 bees. As it takes 10 bee loads to provide enough pollen to rear one bee, our hive will need over 2 million bee loads to rear 200 000 bees. Remember this amount of pollen is for brood production only. Young adult bees need a lot of pollen themselves in the first three to four

days of life and pollen is also used by bees producing bees wax.

So our ideal hive now has plenty of honey; two to three frames (or equivalent) of pollen and the young queen. What else do we need to consider?

We tend to think of honey production in terms of the flowers only, especially in poor seasons. A poor season is always blamed on the weather, soil temperatures or neighbouring apiaries. This is partly right, but I would suggest that even in a poor year a strong hive will gather some nectar – certainly more than a weak hive.

If we assume the flowers are producing nectar, the amount of honey a hive will produce is determined by two things: The population of adult bees and the efficiency of each individual bee.

American scientists have studied these two factors and have found that production is higher in the strongest colonies since they have more bees available to forage for nectar. This increase in production is not a simple mathematical relationship, for a colony with 60 000 bees may produce 2.28 times as much honey as a colony with 30 000 bees. Also, the production per bee increases as the population increases and thus a colony with 60 000 adult bees may produce 1.15 times as much honey per bee as may bees in a colony with 30 000 population.

The strain of bees also has a marked influence on the rate of production of adult bees and this may affect the production too. Let's look at what things affect the total number of bees in a hive.

Obviously the population at any time is related to the birth rate and to the death rate. The birth rate is determined by the egg laying capacity of the queen. Well-reared queens of good genetic stock have produced up to 3 000 eggs per day. However, rates of 1 500 to 2 000 would be better averages. The limiting factor now becomes the physical restriction on egg laying due to the lack of suitable comb.

The queen laying 2 000 eggs a day will fill a full depth comb every three days and will produce brood occupying seven full depth combs. In practice, up to four combs in a single brood nest system are not available to the queen.

In these cases, the full potential of the queen when it is needed most, that is in the spring, is not being realised.

The solution to this problem is obvious, we can reverse brood boxes, we can add the second brood box to single storey hives early in the season, we can add empty combs to the centre of the brood nest. We can be careful how we use queen excluders or we can use follower boards to allow the queen to lay in the outside combs.

Maintaining bees on pallets helps to keep the inner sides of the hive warmer. The queen can now lay right to the outside comb on the warmer side. All these things help the hive to reach its theoretical maximum adult population before the honey flow.

The life span of the adult bee is also very important. Adult summer bees tend to live from 28 to 35 days with an average of 31 days.

Nosema disease will markedly affect the length of life of adult bees and will reduce it to about half that of healthy bees. The following table gives some idea of the affect egg laying rates and death rates of the adults can have on total hive numbers. These figures have included a deduction of 10 per cent for larval mortality.

THE EFFECT OF EGG LAYING AND ADULT DEATH RATES ON COLONY STRENGTH

Oviposition Rate (Eggs/Day)	500	1 000	1 500	2 000
	Maximum populations of adult bees			
Length of life (days):				
35	15 750	31 500	47 500	63 000
31	13 950	27 900	41 850	55 800
28	12 600	25 200	37 800	50 400
20	9 000	18 000	27 000	36 000

Productivity/bee

We have seen what factors affect the total hive population, now what about productivity/bee?

Foraging for nectar and pollen is the final activity of honey bees. So if worker bees live longer they will produce more, all other things being equal. Researchers have found that bees that begin foraging at an average age of 28 days only forage for eight to nine days. In contrast bees that begin foraging at an average age of 15 to 16 days do so for 14 to 15 days, nearly twice as long.

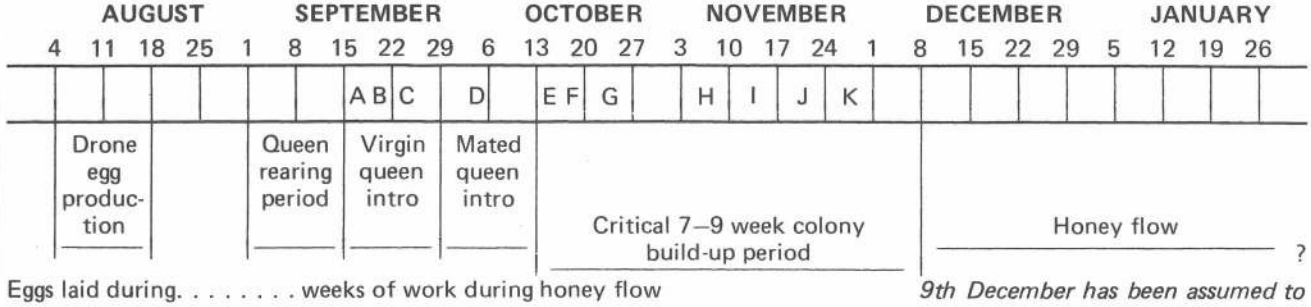
Now what makes the bee begin foraging earlier than could be expected?

The larval stage of the honey bee lasts five days whereas the nurse bee stage of the young adults lasts about 10 days. One nurse bee can provide food for more than one larva, so even at the rate of one nurse bee to one larva there will be a surplus of nurse bees.

In small colonies the excess of nurse bees will not be very significant, but in the stronger colonies in which the

COLONY PREPARATION FOR THE HONEYFLOW

A CALENDAR OF EVENTS



Eggs laid during. . . . . weeks of work during honey flow

A	0	G	2–3
B	0	H	2–3
C	0	I	2–3
D	0–1	J	2–3
E	1–2	K	1–2
F	2–3		

9th December has been assumed to be the start of the major honeyflow; however variations occur about New Zealand.

queen is laying 2 000 eggs a day there could be a surplus of 10 000 or more nurse bees. What happens to these nurse bees? Basically they're weaned early.

Because they cannot dispose of their royal jelly, their hypopharyngeal glands degenerate early and they become foragers. Feeding larvae is very exhausting work and this is why winter bees with no larvae to feed can live for months instead of weeks. This also explains why these young bees that begin foraging early live longer than foragers that start out later in life. This is in spite of the fact that foraging is such a risky business with high mortalities in the field.

This is the secret of why strong hives have a greater field population than weak hives and why they produce so much more. They simply have a surplus of nurse bees which become foragers earlier in life and they live much longer too. This is the basis of our recommendation that any colonies that do not have a population of 20 000 bees (a very full single box) by the time of the honey flow should be united.

Now let us see what we have. We ideally have a young queen of superior strain, we have plenty of honey stores and pollen, an excess of good, clean worker comb for the queen to lay in and an excess of foragers. What else is there? Just good timing to bring all these together.

Here we need to refer to a calendar and plot on it the estimated dates for various nectar flows, especially the main clover flow.

The calendar of events included with this article tells us that to get maximum effort from our field bees for a nectar flow lasting from mid-December to near the end of January, we need to begin stimulating intensive egg laying around the middle of September.

I realise that in many areas flows may begin after January. This chart is based on the fact that it takes 21 days from the time the egg is laid until the adult worker emerges. The worker may spend another 21 days on hive duties before becoming a serious forager for a further nine to 10 days.

As we have seen, strong hives will release a greater number of nurse bees into the field up to a week earlier than "normal". These bees can also be expected to forage longer for 14 to 15 days. The critical egg laying period for our queens is from the middle of October to the end of November. October is often a death period so heavy feeding may be required.

Mated queens should ideally be introduced into colonies in October. Queen cells should go out from mid to late September. The queens usually take four weeks to start laying which brings us well into October again. This means queen cell production should begin early in September or as soon as there are plenty of drones in the hives.

Two other management techniques come to mind to help our queens: One is to reduce the problem of drifting, the other is site the apiaries in areas where they can get some shelter and easy access to a cross selection of nectar and pollen sources.

* * *

All this is not theory, it is practice. It happens by itself in certain hives every year, with or without our help. What we need to do is to appreciate what is happening and why. Then try and get as many hives as possible peaking at the right time.

However, having said all that, a man called Murphy once made a very profound observation, we call it Murphy's law and it simply states that "if anything can go wrong it will". I can see the situation where you work yourselves to the bone getting every hive requeened, well-fed with lots of lovely new combs in the hive and plenty of bees, then along comes Murphy or a bunch of sunspots. What happens? Three-quarters of your hives swarm!

Good luck for the next season.

Annual meeting honours and elections

THE STRENGTH of the NBA executive was reaffirmed at the annual meeting when the sitting chairman, Mr Paul Marshall (Lyttle/Clissold) was re-elected after a challenge from Mr Michael Stuckey (Herron/Bird). Mike Stuckey was then re-elected vice-president (Herron/Robinson).

Two stalwarts in the association were honoured by the meeting with life membership. These were Mr Graham Beard who retired from being the NBA's secretary and Mr Percy Berry, who had done so much for the bee-keeping industry from within.

Mr Dickinson in paying tribute to Graham and Joan Beard said that the association had never rued the day it had swallowed its pride and asked the Pork Industry Council if they could provide secretarial help. Very soon with Graham's knowledge they had been able to find which government doors were open. Graham also drafted the rules of the association. Furthermore, he and his wife Joan had often offered hospitality to the executive when they were in Wellington.

In accepting life membership and the accompanying gift, Graham said he thought that the primary industries were not getting the service they deserved. Marketing in agriculture needed to be co-ordinated with a competent base plan. At present everything was too piece-meal which made for inefficiencies and frustrations.

Notwithstanding, there was not much difference between all the primary industries, which seemed to induce a happy atmosphere.

However, he did feel in the bee industry, that sectional interest should be put down for the overall good.

Percy Berry was also elevated to life membership. By various speakers he was described as "a great friend to the industry", "a diminutive man who took on anything or anyone", as having taken on the beekeeping cause when it seemed doomed but having steered it back to a sound position. Mr Jansen described him as the epitome of the adage of nothing succeeding like success, and of having led the industry into the freedom and prosperity it was now experiencing. A great protaganist of free enterprise and individual initiative.

Perhaps the most revealing plaudit came from a Mr Berry junior, who said that Mr Berry senior had paved the way for private honey exports. At other times he had often cost their firm considerable sums of money which had created great alarm, but had always proved in the long run to have been the correct course to have set for the industry as a whole. The occasion was particularly appropriate as it was his parents Golden Wedding anniversary that weekend.

Mr Berry said it had come as a great surprise to him and he was greatly flattered by the honour. "Needless to say," he said, "I have seen a great change in the industry over the years, and increasingly in the future, I foresee honey becoming a luxury item."

What happens to the HMA's gold?

by Simon Mill, assistant editor

THE MOST contentious debates at the NBA conference in Tauranga, centred, as was to be expected, around the disbursement of HMA assets. The two main matters to be resolved in the future were:

- To whom do the assets belong?
- Should any co-operative, if formed, be allowed money from these assets at nominal rates of interest?

These two basic tenets were debated and argued about by two opposed factions in a series of motions, amendments, counter amendments, procedural points of order and resolutions.

The resulting scenario produced no conclusion other than the right to differ and if possible, dispute, the outcome of any decisions made by the HMA, an "independent" arbitrator or possibly even in the last resort, an imposed government decision.

With votes swinging 27:21, 27:24 and 25:26 it can be realised that opinions are evenly divided.

With no power to make any binding action over their resolutions, the conference really just became a sounding board for contrary opinions well-known and well-expressed so often before.

No doubt democracy will prevail. And in its true and just fashion, 27 or so will get their way, and 24 or so will democratically acquiesce, after the HMA or the government have studied the motions and acted impartially.

But action seems to be the last thing that anyone really wants, unless the decision is favourable to them.

Motion number one was withdrawn.

Motion number two which sought to request the minister of agriculture through the HMA, to appoint an arbitrator to establish the original funding of the HMA, brought an amendment from Mr Ian Berry that made the independent arbitrator "acceptable to the steering committee of the proposed co-op, the HMA board and the NBA executive" to make sure the decision would be as unbiased as possible.

Robin Jansen said that he thought that "arbitration" would be better than "an arbitrator", but David Penrose said that the arbitrator was purely to indicate how the funds were established and would not necessarily be binding on the parties.

Russel Berry then asked, "Would it not be binding?"

Mr Hayman replied that if the findings of the independent arbitrator were not acceptable to the parties, the government would almost certainly make a binding decision on its own.

Russel Berry and Robin Jansen then moved an amendment that the motion finished at "established" which would have left it to read, *"That this conference recommends that the HMA requests the minister of agriculture to appoint an independent arbitrator acceptable to the steering committee of the proposed co-op, the HMA and the NBA executive, to determine how the assets of the HMA were established . . . "* This was defeated.

Bruce Stanley thought at this stage they should get on with the motion and make it informal.

Robin Jansen agreed that they should try and come to some arrangement as to the arbitrator among themselves rather than have a government overview imposed on them. Bruce Stanley then reiterated that he would like to see "informally" added after "indicate", but Don Hayman pointed out that the whole motion was only a recommendation, and was up to other parties to take up.

Mike Stuckey then suggested adding to the end "and to indicate how the assets should be disposed."

The final motion then read:

"That this conference recommends that the HMA requests the minister of agriculture to appoint an independent arbitrator acceptable to the steering committee of the proposed co-op, the HMA board and NBA executive to determine how the assets of the HMA were established and to indicate how the assets should be dispersed."

The motion was then passed unanimously.

Motion number three . . . *"That this conference recommends that the HMA assets should not be loaned to a marketing co-op,"* (Russel Berry/Jansen) had a somewhat stormy birth when the chairman questioned its admissability, but was guided by the rules of the association which allowed motions on any business that had been mentioned in the president's report.

A welter of amendments first freeing the motion ("at below commercial rates"), then tightening up again (" . . . for trading"); then even tighter, and then even tighter again, and finally strangled, the motion was recast by Gossett/Bartrum:

"That this conference recommends that HMA assets should not be loaned to a marketing co-op at below Rural Bank interest rates other than monies needed to buy the packing buildings and facilities in the South Island."

This was passed.

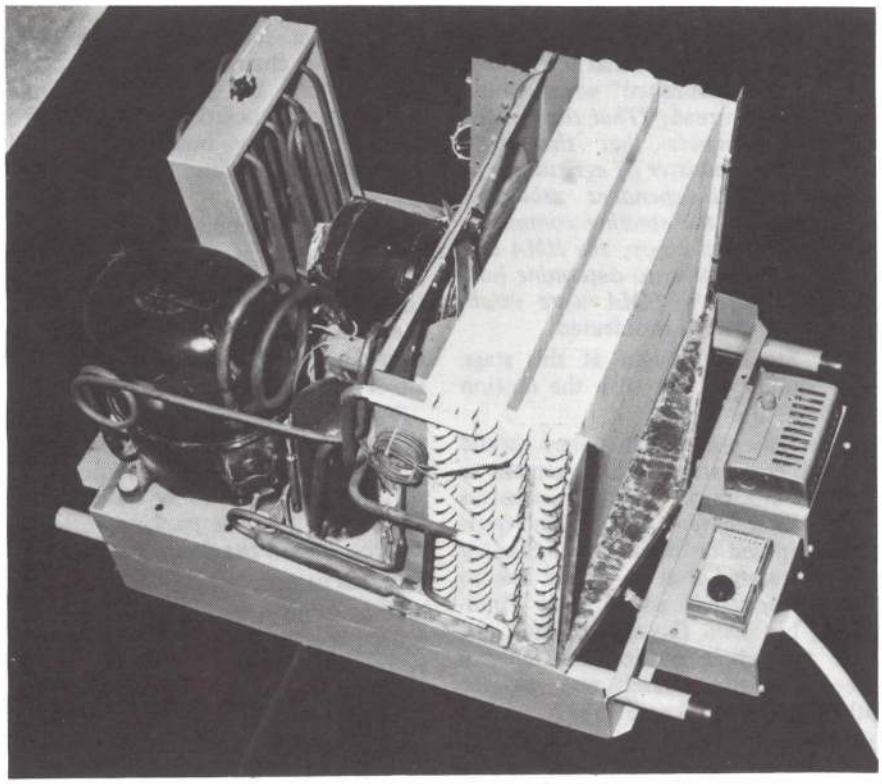
Motion number four didn't make the order paper because of votes recorded against it going on.

Throughout, government representative Don Hayman brought a touch of non parochialism to the meeting. He said that all beekeepers had contributed to the funds of the HMA at one time or another. He also pointed out that the HMA had stabilised the New Zealand honey market in the past using cheap government money and its current assets reflect that. "I cannot see why if the HMA becomes a co-op this stabilising influence should not continue," he said.

"Since its actions will benefit all beekeepers I can't see why it should not have access to the low interest money – particularly during the time it takes to determine where the money came from."

So the great debate ended virtually in limbo and went out "not with a bang, but a whimper."

Dehumidifiers



The workings of a dehumidifier. In use this is covered with a perforated-ended pressed steel case. Actual size of this small unit is 1½ metres long and a metre wide and high. It is transportable by two men with some effort or one trolley with ease!

CHRIS DAWSON'S excellent transcript of Dr Don Peer's thought-provoking talk on honey production and processing in Canada must have given a jolt to the more orthodox and conservative individuals in the industry.

One interesting point was their extraction of unsealed, high moisture content honey and the use of dehumidifiers to reduce the moisture content to a level at which it conforms with standard specifications, one of the ways they double production per hive.

It is obvious from this that dehumidifiers are definitely a part of our future, a technical development that cannot be ignored.

However, some readers may be unaware of what a dehumidifier is and what it does, and it is hoped this short note will remedy this.

The unit

A dehumidifier is a drying unit used in a drying chamber but occupying only a small part of that chamber, the rest being taken up by air space and by whatever is to be dried, in the sense of having moisture removed from it.

Energy

Energy is required to evaporate moisture. Once evaporated this water vapour has a latent heat of evaporation which can be recovered if the vapour is changed back to liquid. Most drying systems vent moist air and hence lose the latent heat plus the heat of the air, but in the dehumidifier this heat is retained.

What a dehumidifier does

A dehumidifier acts in exactly the same manner as a refrigerator but in reverse, if this is not too Irish. Warm dry air is passed over the surfaces of the substance to be dried.

In doing so the air loses a little heat and picks up a little moisture. How much it loses and gains will depend upon air speed, relative humidity and temperature differential.

And how it does it

The dehumidifier could be said to be in certain sections – cold, hot, and hotter. The warm damp air is then circulated through the refrigerator section, where it cools and, because cool air holds less water vapour than warm air, some of the moisture condenses out.

The moisture then drips down to a collecting tray at the bottom and can be drained away, being measured on the way to show how much moisture is being lost per hour if required.

Then the cool air is heated as it passes over the next section, where the latent heat of evaporation is regained, and the heat of evaporation is regained when it is taken through a heating element bank before being recirculated through the drying chamber, and over the material being dried.

The chamber

The drying chamber is important. Dehumidifiers are energy efficient and use electricity which, even if it costs three times the cost of diesel, is still readily available at the push of a switch and without extra equipment. The efficiency is gained when they are used correctly in sealed, well-insulated chambers so that no heat is lost.

We are fortunate in New Zealand that our Isowall construction of 100 mm of polystyrene with aluminium surface and baked enamel finish is ideal for this purpose. It makes a very neat, light, cheap, insulated chamber which is perfect for dehumidifier drying and very hygienic.

Drying

Three things are needed for controlled drying:

- a heat source thermostatically controlled
- control of humidity
- adequate air circulation

Heat and humidity control are given by the dehumidifying unit but it is usual to augment air circulation with additional fans.

Specifications

Dehumidifiers can be bought in various sizes with the smallest ones being fully mobile. They can be wheeled around and plugged in where required, nor is there any reason why more than one unit may not be used in any chamber.

Large chambers may use eight, as mentioned by Dr Peer, but may be taken out and used elsewhere if superfluous. Small ones can be down to the size of a picnic basket, large ones may be the size of a bedroom.

Temperatures

Dehumidifiers are in the medium temperature range. Typical temperatures and relative humidities through a unit are:

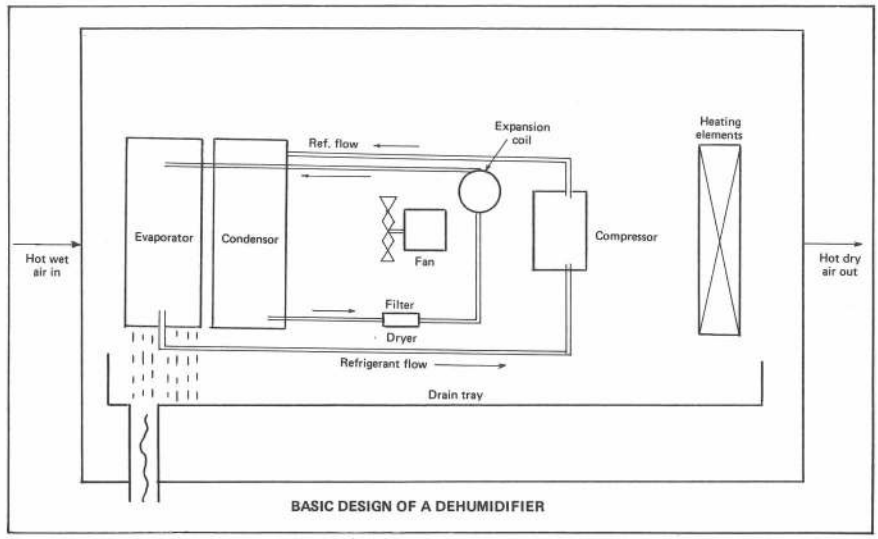
AT	Temp deg C	rh per cent
inlet	45	70
evaporator	25	100
condensor	48	55
heater	49	52

Conditions can be set for any given situation and it is quite usual for milder conditions to be used at the beginning of a run when evaporation is easy, and then made progressively more severe by increasing settings towards the end.

One limitation on the temperatures used has been the refrigerant but research has been going on into this and it is anticipated that higher temperature units will be available in the near future if required. Naturally the larger the surface area exposed, the greater the drying rate.

Cost

Cost is, of course, a factor but increased production with reduced wastage at a guaranteed moisture content is an attractive proposition. Cheapest unit quoted at the moment (June 1980) is $3 248.



BASIC DESIGN OF A DEHUMIDIFIER

Suppliers and the New Zealand agents are:

Westair Dynamics Ltd (of the UK).

New Zealand agents: W. & R. Jack Ltd, Box 9748, Wellington.

CEAF (from Italy).

New Zealand: Louis Eichmann Ltd, Box 68-112, Auckland 2.

EBAC (of the UK)

New Zealand: Niven Process Engineering (NZ) Ltd, Box 5543, Auckland.

At this stage EBAC are perhaps the best – they could be described as "second-generation" dehumidifiers. It is expected that some New Zealand firms will shortly manufacture their own models.

World list of beekeeping journals (L16)

FOR MORE than 100 years, journals have played an indispensable role in spreading news of the latest inventions and discoveries in beekeeping. In doing this, and in giving information about association activities, they help to expand beekeeping in many countries, and to increase its profitability.

In order to help beekeepers to benefit from the many journals available to them, the International Bee Research Association has just published a list of 130 journals from 40 countries, with their editorial and administrative addresses. This has been done at the special request of the Editors' meeting at the 27th International Beekeeping Congress in Athens last September.

The World list of current beekeeping journals will enable beekeepers to obtain journals they have not read before, to learn about conferences outside their area and, when planning journeys, to visit centres of beekeeping interest. Conference organisers can introduce their meetings to a wider beekeeping public by using the list, and equipment manufacturers and supply houses can extend their advertising, and thus their sales. Many of the journals listed will provide a specimen copy, often free of charge.

The World list (L16) is available direct from the International Bee Research Association, Hill House, Gerrards Cross, Bucks SL9 ONR, England, price £2.40, or US $6.50, post free.

It woykes, but we're not ready for it

ARTIFICIAL INSEMINATION offers a huge potential to New Zealand honey producers, but by and large the industry is not ready for it. That's the view of agricultural advisor John Smith who has just spent two years investigating its potential.

Speaking at the Tauranga seminar organised by MAF, John said he'd planned to give an address outlining the potential for artificial insemination co-operatives and so on.

"I was in airy-fairy land. The industry doesn't have the finance to set up a proper AI programme and nor is it ready for it when most of us still have to learn to use our hive tools," he said.

Making an analogy with the starting frames of the film "2001 – A Space Odyssey", where a primitive man with the most primitive tools, a stick, throws it into the sun where it miraculously turns into a spaceship – John said most beekeepers were still beating on their hives with a stick, while AI was the ultimate tool – the spaceship.

"AI has been a wonderful tool for me. I have spent the last two years tripping around New Zealand telling people about the process and at the same time learning about the status of beekeeping in this country.

"I was horrified when I wandered around the country to learn how backward we were. Most bee breeding programmes here are like banging on the hives with a stick.

"Are we ready for AI?," asked Mr Smith. "Yes, to some extent, because some people are doing it successfully. One is getting five boxes off his hives using his AI bred queens.

"We can't dismiss AI for this reason. But let's first pick up the hive tool and who knows, we'll pick up the spaceship in the end.

"Besides, if we wanted to set up an AI programme it would be really costly. It would take up all the funds of the HMA and then, we might have a better bee after five years. However, I can guarantee we would have a 500 per cent better queen after 20 years."

Progress in apiculture with STAPLA-Comb ST 6

(wax-coated plastic foundation)

The STAPLA-Comb ST 6 has been tested in 40 countries over various years. The aim of the experiments carried out all over the world was to keep the good and so far non-replaceable characteristics of beeswax for comb material but at the same time eliminate some unfavourable attributes of the honeycomb made out of pure wax.

The STAPLA-Comb ST 6 is readily accepted by the bees. It is coated with pure New Zealand beeswax. Absolutely no differences result in drawing-out the STAPLA-Comb ST 6 and in the lay-out of the brood chamber if compared to the traditional wax honeycomb.

The remarkable features of the STAPLA-Comb ST 6:

- **Labour-saving during assembly and use**
- **Of practically unlimited use**
- **Re-useable many times**
- **No damage caused by wax moths**
- **Centrifuging at high speed without breakage**
- **More efficient, stronger and healthier colonies through rebuilding**
- **Wax becomes a real source of income**
- **No short term article but a long lasting investment**

Hygiene

The old wax on STAPLA-Combs ST 6 can be taken off very easily. The combs stand a short-time heating up to 120 deg C (248 deg F) and are simultaneously sterilised. This guarantees a considerable protection against diseases. The renewal of the comb building, often neglected with wax combs, can be incorporated in the working cycle; it represents a considerable preventive measure against all sorts of diseases and swarming.

Centrifuging

As STAPLA-Combs ST 6 with their larger cells are drawn out somewhat higher, a capped STAPLA-Comb ST 6 contains more honey than a wax honeycomb. STAPLA-Combs ST 6 can be centrifuged even at high speed without any problem.

Work involved

The STAPLA-Combs ST 6 can be easily and quickly fastened into the frames. Wire fastening is not necessary.

AEGEAN EXPORTS SOLE AGENTS
DISTRIBUTOR FOR NEW ZEALAND, AUSTRALIA AND PACIFIC ISLANDS.
P.O. BOX 41166, ST LUKES, AUCKLAND.

Please rush me further information about STAPLA-Comb ST 6

Name. . . . . .
Company. . . . . .
Address. . . . . .
Number of hives. . . . . .
Phone. . . . . .

by Paul Marshall, president, National Beekeepers' Association of New Zealand

THIS PAST year has not been without its uncertainty regarding our honey marketing options. Although in the last annual address to conference my predecessor gave a forward look into the industry's future, I feel that following the recent decision of the authority's board on their proposed sale to a national co-operative, it is prudent to review the situation at this year's conference.

In an endeavour to bring into perspective, and to obtain the collective thoughts of as wide a range of opinion as possible, the executive called together a meeting of industry representatives holding points of view on all aspects of supplying, and selling of honey products. These included the H.M.A. Suppliers, Honey Packers', Comb Honey, and Honeydew Producers' Associations, as well as the full board of the authority and the executive.

To assist in launching this type of meeting, I asked for and received the assistance of the under secretary of agriculture, Mr Talbot, in taking the chair. This he was able to do for the first hour, before handing over to his representative, Mr Iain Forbes, of the ministry. Due to the progress made at this meeting a second was held in March of this year.

The aim was not to change industry policy, but rather to present to conference a firm basis on which to discuss future development. From the first meeting held on November 1 1979, the consensus of members noted the current attitudes in the industry as follows:

- That the H.M.A. review the situation at the end of the current year.
- That the administration of export control should be taken away from the authority.
- That it be noted that a South Island operation could in due course be the only commercial involvement for the H.M.A.
- That control over exports was still desired.
- That a new export administration system for controlling exports was needed so that commercial exporters and the H.M.A. were placed on a common footing.
- That the centre of export control should thus be removed from the H.M.A. by the minister and placed by him, in the hands of a competent person who has other employment.
- That the new export control office should set export price minima – this to be done by appropriate and general background studies including those by the H.M.A.'s general manager.

Following this meeting, there developed among a group of South Canterbury beekeepers, the concept of a co-operative to absorb the functions of the authority, on a local level. However, on approaching the authority with the idea, it was arranged, and as I understand it, agreed to by both parties, to carry out a feasibility study of such a project on a national level.

H.M.A. disbandment may mean a more exacting role for the association, possibly setting export controls for price and quality, making it live up to its motto:–
"Better beekeeping . . . . better marketing".

The cost of this, I have been told, is to be borne by the authority in the meantime, although the board has hinted that the total costs of the study will finally come back to the hive levy payer.

As mentioned earlier, in March of this year, the second industry meeting was arranged, and held the day following an authority meeting. Those attending were advised by the authority's chairman that the following resolutions had been passed by the board at their meeting:

- That the authority agrees in principle to the concept of a honey marketing co-operative on a voluntary membership basis, and that the minister's opinion be sought as to the status of the authority's funds and assets if the authority were to be disbanded.
- That subject to the authority being satisfied as to the viability of the proposed honey marketing co-operative, the authority agrees in principle to sell its operations at market valuation, and advance 80 per cent of its equity to the proposed honey co-operative at one per cent interest with the remainder advanced at Rural Bank export rate.
- That this meeting recommends that at the appropriate time the New Zealand Honey Marketing Authority be dissolved.

On the proposal to form a co-operative using authority's assets, there was a general consensus of opinion that there was merit in the idea, and the next step to take as already agreed by the board, was to continue with the feasibility study. This has now been completed and presented by the co-operative proposers to hive levy payers throughout the country, as well as to the authority board on the 7th of this month.

Lengthy discussions as to the viability of such a proposed co-operative and as to whether or not it was the best form of industry organisation, were held at this meeting, before agreement was reached in giving the venture the go ahead. Faith in such a co-operative by New Zealand beekeepers will be measured by the number of shareholders it can attract.

Once formed it becomes in its own right a private commercial enterprise answerable only to the shareholders. As beekeepers, we must reconcile ourselves to the loss of an industry marketing organisation and the protection it has afforded us.

Personally, I would have preferred to have seen the re-organisation take a different form with the establishment of two or more co-operatives rather than the national concept. It may well be seen in the future that co-operation is not only cheaper, but more efficient than co-operatives.

For the supporters of such a scheme the initial costs will be high, and could be prolonged in coping with high overhead costs. From what information that is available I am afraid I cannot give it my support. So far it is difficult to ascertain who the interim directors of the proposed co-operative will be, nor have the aims and objectives of such an organisation been stated.

The impression so far gained is that they will be only changing the name over the door, and continuing on as

the old H.M.A. has done with all its imperfections. However, such judgement may be wrong and I look forward to seeing the prospectus, which it is hoped will at least name those who are calling for the backing.

With the opening up of free trade, our next priority must now be consideration on what export controls in the categories of both price and quality the industry should follow, either on a voluntary or compulsory basis. Although this is still the prerogative of the authority, while it is still in existence, the time is coming when the association must accept the responsibility in this field of honey marketing.

After the authority has been disbanded, it will remain the sole, fully representative industry body to do the job. Perhaps then, and only then, can the association live up to its motto . . . better beekeeping, better marketing.

For the coming year the executive must consider the other courses of action demanding our attention, as can be seen from the remit paper. These include staffing of the apiary section of the Ministry of Agriculture, and apiary tenure on Crown land.

Other apsects not on paper are the educational side of apiculture, and the interest being shown by beekeepers in both Marlborough and Poverty Bay in forming new branches of the association.

In presenting this address I will take the opportunity to report briefly on the Agricultural Chemical Board, of which I am the N.B.A.'s representative.

Much publicity has been given to the controversial question of 2,4,5-T and I can assure you that it has received its fair share of attention by all members of the board. Even as beekeepers, we came into our share of publicity on the contamination factor of honey, which as I understand it, has been taken no further than being voiced.

Agricultural chemicals are a complex subject, and current registrations of fully registered products now stand at 888, with another 138 on the provisional list.

Granted not all are insecticides or acaracides, which are of major concern to us, but even they have a total of 101 classified active ingredients. As an industry, we must remain vigilant on the subject of agricultural chemicals, especially as the demand for bees to pollinate tree and vine crops increase. No more so than in the field of kiwifruit pollination which requires a continuous close liaison between grower and beekeeper to overcome its many problems. Much can be done in understanding the other person's point of view and the problems he has to face.

Finally, I would like to thank those who have helped me during my term of office. These include Mr Talbot, the under secretary to the minister of agriculture, for his help in setting up the industry meetings, as well as his staff of the Ministry of Agriculture, especially Mr Iain Forbes and Mr Grahame Walton.

The chairman of the Honey Marketing Authority, Mr Percy Berry, and the members of his board, all of whom have been most approachable when required to discuss industry problems. The N.B.A. executive for its support, as well as Mr Graham Beard, executive secretary until early this year, and his replacement, Mr David Dobson.

The editor of the Journal, Mr Trevor Walton, for maintaining the high editorial standard of the New Zealand Beekeeper. Lastly, but by no means least, I thank my wife, Alison, who has put up with my many absences from home, and pre-occupations with industry matters.

by Percy Berry, chairman, New Zealand Honey Marketing Authority

IT IS ALWAYS a pleasure to address conference on honey marketing matters. It is particularly a pleasure when our marketing is in better shape than it has ever been, and when our honey producers are showing constructive initiative in making further improvements.

The trading operations of the authority have continued to yield higher returns to its suppliers and the estimated payout for the year ending 31/8/80 is in excess of $1 per kg. This compares with 86c a kg last year which was then the highest payout in the history of the authority.

The intake of honey to the authority during the year was 1 795 tonnes, 1 685 tonnes of which was produced in the South Island and 110 tonnes in the North Island. The production pattern this year resulted in an acceleration of the normal decline in intake from North Island suppliers. The volume of honey sold this year will exceed the intake.

With the approval of government, the base price has been abandoned and suppliers will receive the net realisations from the year's trading. To arrive at this figure it will be necessary to establish the true value of stocks on hand at the end of the year and also to define the influence on the year's trading, resulting from the value that was placed on the opening stocks. Nothing will be transferred to or from reserves.

In accordance with the options set out in the conditions of supply, some honey was purchased outright for cash, (95 tonnes), some was accepted for sale on owners behalf, (30 tonnes) and the balance of the intake, (1 670 tonnes), was pooled in the normal way.

Payments made to date for intake to the pool, total 60 cents per kg and as mentioned, it is expected that the payout for the year will exceed $1 per kg.

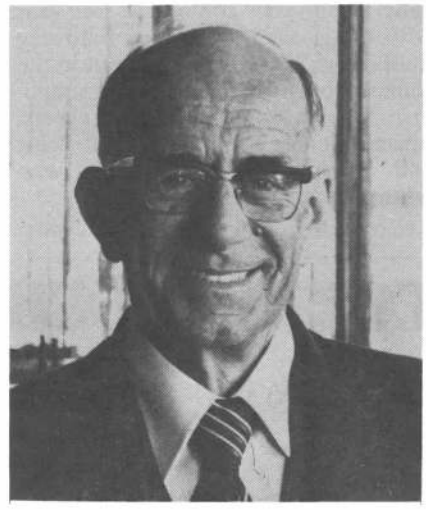
It is intended that the final payments will be made in November. An interim payment will be made in September if funds are available.

Domestic market. In the 1979 annual report of the authority to the minister of agriculture and fisheries the point, "the honey sold on the local market yielded significantly less than that exported" was made. You will remember that I also dealt with this matter at some length at the last conference.

I am glad to be able to tell you that this matter has now been corrected. The prices being charged on the domestic market are now reasonably related to the export value of our product.

I see it as our responsibility to keep it that way. It is the producer's right to receive the real market value of his product. By the same token it is the producer's responsibility to see that the consumer is not asked to pay more than that value.

If we are to accept that responsibility, we will relate future price movements in our domestic price lists to movements in the export value, rather than relating to movement in costs of production.



For the purpose of comparing the yields from the export and domestic sales, export tax incentives should be excluded from the calculation. Otherwise the domestic prices would be set at an artificially high level. For many years they have been set at an artificially low level. True market value should be the aim when establishing our price lists in the future.

As a general guide I estimate the present average value of bulk honey in New Zealand is about $1.20 to $1.25 a kg irrespective of the market for which it is destined. Before the end of the year I would expect to find some upward movement – ($1.20 to $1.25 a kg excludes drums).

During the year a number of authority meetings have been held for the purpose of examining the various options open to the industry in its endeavours to further improve its marketing procedures and the net returns to the producers. Observers have attended some of these meetings with resultant better understanding by all concerned.

I called a meeting of all sections of the industry at Hamilton on September 14, 1979. The meeting assessed the scope of the packing facilities being used by beekeepers in the North Island. It also considered the advisability of continuing the present operation of the Auckland packing plant owned by the authority.

The meeting recorded the following resolution "That the meeting suggests that the Honey Marketing Authority stay in its present building and operate as it has in the past, until April 1981. During that time it will keep investigating all options open to it, for new sites and buildings, and re-assess the Honey Marketing Authority Auckland needs, closer to 1981."

That opinion was consistent with authority thinking. The question of whether an alternative packing facility should be established and owned by the authority had not been resolved by members of the board.

During the year, plans to build a new factory at Pleasant Point were closely considered. Finally no action was taken, except to make a small investment in land for a building site which has appreciated in value. The present thinking is that the existing factory should be upgraded rather than building a new one.

Since becoming a member of the authority the main thrust of my endeavours on behalf of the suppliers, has been applied to improving the payout. I have concentrated on helping to obtain improved prices on both the local and export markets. Generally I have relied on the government audit to check that the figures in the accounts are correct and I have certainly no reason to believe they have ever been otherwise.

Further, I have relied on the arguments of the government representative on the board being based on correct figures, or on reasonable estimates of the statistical records when estimates are used. In the matter of the estimates used for assessing the sectional interests in the reserve funds, I have recently looked more closely at the figures and the contentions of the government

1980 NBA CONFERENCE

representative and others.

It is essential that the board check that they are reasonable figures before any agreement is completed between the board and the proposed co-operative.

There seems to be to me serious discrepancies between the figures recently used and a reasonable estimate of the stake of honey suppliers in the funds of the authority. The board wishes to give all reasonable assistance in financing the establishment of a soundly based co-operative for those who wish to be involved.

While there appears to be no means of establishing the exact ownership of the funds, it should not be difficult to assess an appropriate allocation.

In the meantime the board has no desire to be too exacting about the amount of low interest rate money it makes available for the early stages of the formation of a co-operative. It will, however, use its best endeavours, to be reasonable to all concerned in its application of authority funds to any project.

As I explained to a board meeting on July 7 and 8, seals levy paid to the authority by packers over the period 1954-74, amounted to $752 745, less costs of collection. Over $400 000 of this was paid by 1964.

Since 1975, board policy has been to pay to suppliers all they were entitled to receive. This did not please government, but it did give to supplier the money that was theirs. Over the period of price stabilisation, 1973-80, the trading operations of the authority resulted in a net transfer of approximately $307 000 to the reserves. The whole of the authority's funds now seem to be the funds of the whole industry.

Further, it helps to get things into perspective if we realise that, compared with 1975 payout price of 54c a kg, the suppliers, this year alone, will receive additional payments which amount to a sum greater than the total value of the authority funds.

Hive levy payers have recently received figures prepared by the chartered accountant, Mr H.N. Dellow, relating to the formation of a co-operative. The package also included a brief newsletter from me which concluded "If the industry wishes to take more time to consider its various options, there does not appear to be any urgent matters calling for immediate decisions."

Last month Mr Dellow addressed meetings under the chairmanship of Mr S. Lyttle in Christchurch, Gore, Palmerston North and Hamilton. Subsequently Mr Dellow reported to the board at a meeting held in Auckland on July 7 and 8.

I attended the four regional meetings. I gained the impression that some support for the formation of a co-operative, particularly in the South Island, was enthusiastic, while in other cases some producers felt somewhat at a loss to clearly define any secure alternative outlet for their honey, and their support seemed rather more tentative.

After the fourth meeting, the one held at Hamilton, those present decided to carry on the discussion and they did give some consideration to alternative suggestions and existing operations.

The opening up of export opportunities to producers during the last few years is resulting in steadily increasing exports at prices which are benefitting the industry and the country.

It does seem that few producers in the North Island have serious doubts about their marketing options, but for those who have such doubts, we should endeavour to make appropriate provisions.

In the South Island the position is quite different. My thinking at the time I addressed conference last year will be gleaned from the following quotations "I feel there is merit in the thinking of many South Island suppliers. They visualise a beekeepers' organisation centred at Pleasant Point and set up by those producers who wish to be involved."

I also made the point "I feel that some producers are at present far too remote from the operations which determine the price they will receive for their product."

I am convinced that when the Honey Marketing Authority trading activities cease, the authority's property in Auckland should be sold for cash and that the proceeds should form part of an industry fund.

In the earlier days of my association with the planning in our industry, "organised marketing" was still the catch cry of those who had new ideas for replacing previous organisations which had failed. But organisation has not brought satisfaction.

There may be too much truth in the suggestion that "When authority presents itself in the guise of organisation, it develops charm fascinating enough to convert free people into totalitarian states."

That may be overstating the position. Marketing organisation is necessary but its success does depend on voluntary involvement in any particular grouping of producers.

Most beekeepers find that to be actually involved in, or closely associated with the selling of their product is sensible, enjoyable and profitable. Marketing plans which fully accept and provide for this fact are almost certain to succeed.

CORRESPONDENTS

CO-OP QUALMS

Dear Sir,

I am writing to express my doubts on starting the new Honey Marketing Co-operative.

It seems to me that the beekeeper is the one who will lose out. Firstly he will have to pay in to start this venture off and he will not see much of a return for his money for at least four years of normal trading, or until finances are secure, which has been stated by those persons trying to form the co-operative.

Secondly the average beekeeper would find it very difficult to provide the necessary capital to get the venture off the ground.

At present the HMA do at least pay out on some sort of a regular basis and beekeepers know they have the expertise to market honey overseas.

Although the pay-out is not as high as private packers, it is certainly much better than getting next-to-nothing for up to four years. What is wrong with updating the present HMA instead of creating a lot of financial and mental burdens for everyone.

I feel this co-operative is going to have all the old problems of the past and not solve many of the new ones to come.

Yours,

J. Jurgens,
Taumarunui.

DO YOU WANT ME?

Dear Sir,

I am writing to enquire into the possibility of obtaining a beekeeping position in New Zealand. I am interested in teaching practical beekeeping, setting up apiaries in new locations and also in working for a company (particularly doing queen rearing).

I am a 30-year old male with eight years experience. I own and operate 100 colonies and have experience in all levels of cottage industry beekeeping. In particular I have experience in pollination of fruit trees, queen rearing and comb honey production.

If you know of any agencies who would be interested in a beekeeper of my experience please write to me.

Thomas Tillman,
Box 1,
Embudo, New Mexico,
87531 U.S.A.

Government Report

presented by Mr Iain Forbes, Advisory Services Division, Ministry of Agriculture and Fisheries.

I APOLOGISE for the absence of Mr Rod Talbot, Parliamentary Under-secretary to the Minister of Agriculture and Fisheries. He was not able to get leave of the house because his minister was not going to be there either.

Honey marketing authority

The main topic of concern to most beekeepers since your last conference is no doubt the Dellow Investigation concerning the establishment of a honey marketing co-operative as a possible successor to the Honey Marketing Authority.

Wearing the hat that Mr Talbot has lent me for this occasion, may I pass on his firm opinion that events have got to the stage where he believes that the real level of support for the concept, that was put to him following the March meeting, should be tested.

This means measures to form the co-operative should proceed without further delay and the first call should be made for shareholders' funds. Mr Talbot is behind the idea that producers should have a major say in trading in their product if that is what they want. He sees no benefits from further delays and is keen to see positive progress.

Government wants your industry to control its own future and be responsible for it.

Could I now leave aside the hat borrowed from Mr Talbot and wear my own. The danger in inviting people to open your conference is the risk you run of receiving gratuitous advice – today is no different!

I am involved with about twenty other small export industries in horticulture. Almost without exception they have come to the realisation that long term survival depends on careful planning.

Have you got a plan for the export honey industry? How good is your market intelligence? How frequently do you up-date it? What system do you have of letting beekeepers in New Zealand know about changes in the market place? Do you know what your competitors are doing? – all the time?

If your industry is going to expand where is the investment finance going to come from? Are you aware of the competition for investment finance in New Zealand now? Is your plan good enough to secure your share of that finance? Is your quality control up to the demands of the market place?

At this stage in the development of a co-operative movement in New Zealand beekeeping, may I quote from a recent Australian fruit journal where Mr Jim Mainwaring of the New South Wales Department of Agriculture, analysed the reasons for success or failure in Australian co-operatives. I'll leave a copy with your secretary.

1. Duties of producer-directors must be clearly defined and carried out.
2. High calibre management is required.
3. There must be total commitment of all members.
4. Co-operatives must be genuinely market orientated.
5. Communication with members is important.
6. A strict code of ethics must be adhered to.
7. Sound planning is necessary.
8. Adequate financing is necessary.
9. Education in co-operative principles and practices is essential.

In summary, it has been said that co-operatives are most successful when the following conditions prevail:

- when production is concentrated in a small area making supervision easy.
- when the number of producers are few and they are highly specialised.
- when growers have had successful past experience in working together.
- when skilled leadership has been developed.

I see in the June "Beekeeper" a quote from Don Peer – "Hey man the foreign market is a War Zone" and comments on greatly increased quantities of honey from China on the world's markets. How good is this information? Your market intelligence should be telling you that.

It is probably time that the beekeeping industry took time out to see where it is going to be in 5-10 years time and how it proposes to get there. Graeme Walton will be talking about this later in your conference.

MAF

Over the last few years government has made it very clear that MAF and all other departments must review their workloads. New activities can only take place out of savings made in old.

The apiary section is bearing its share of this policy. While the figures published in the "Beekeeper" and other places describe a fall in apiary section numbers from 13 to 8 (1975-80), the true figures are 13 to 10.

However, MAF is using an additional 30 staff, on a part-time basis in hive inspection, honey sampling, export certification and apiary registration work.

I suggest that the total MAF input to your industry has increased rather than decreased.

Disease

I am very disturbed when a beekeeper comes into my office and says some beekeepers are not reporting disease. It was claimed that one reason for this was because the administration of the Apiaries Act by some staff was "too tough".

Let me assure you that MAF policy over disease has not changed and has I believe, the strong support of the majority of beekeepers. We would not change the policy without discussing it with you first.

Quality assurance

There is a difference between quality assurance and quality control. Quality control is your business, not MAF's. You produce a product and you are responsible for its quality.

However, importing countries require certain assurances about the products they import and it's MAF's business to provide those assurances to the authorities in those countries. This may mean monitoring the quality control systems employed by beekeepers and honey packers. The kind of assurances we have to give are getting tougher all the time.

For honey the main requirements concern bee disease, sugar analyses, antibiotics and pesticides. Different countries have different requirements.

Other than in the meat industry MAF has moved away from a quality control role – which we have done for honey for many years, to a quality assurance role, which we are now proposing for your industry also.

The detailed discussions which Graeme Walton has held with your executive – the HMA, the comb honey people and the honeydew peoples' views over new legislation have all been with this end in view.

MAF will do its best to be aware of the entry requirements for honey in the different countries although the

final responsibility for up-to-date information will always belong to the exporters.

You should realise that the four things I mentioned earlier – bee disease, sugar analyses, antibiotics and pesticides, may frequently mean that the exporters will be required to arrange for their products to be analysed.

MAF's responsibility is to assure the authorities in other countries, that the analyses have been done and that the methods used are satisfactory. This is the way world trade in food is moving.

Legislation

I regret to say that so far we have been unsuccessful in getting a high priority for framing the new legislation which Graeme Walton has been discussing with your leaders over the past two years.

He has done his bit – the basic work has all been done – we are going to try again to get a higher priority, so that the parliamentary counsel will draft the slight change needed to the Apiaries Act, which must precede the new Honey Export Regulations.

Beekeeping restricted areas

As a region for beekeeping, the Bay of Plenty has had its share of problems and challenges over the years.

One of these difficulties has been beekeeping in a zone which can at some stages of the year, and under certain conditions, result in the production of toxic honey.

We now know that this toxic honey is the result of bees foraging on the sweet exudations of the Passion Vine Hopper insect when it feeds off the sap of the Tutu plant. However, it took many years to discover this fact.

Over many years beekeeping in toxic honey areas has been a subject that has occupied, even pre-occupied the time of beekeepers, ministry staff, the Apiaries Advisory Committee (a committee set up by the Minister of Agriculture to advise him on the best way the toxic honey areas can be operated), and even occasionally the time of the minister, (not to mention solicitors).

Not so many years ago it was considered best that a large proportion of the Eastern Bay of Plenty be declared prohibited to beekeeping. Today there is a far more flexible policy in operation.

This policy is designed to make these areas available for beekeeping purposes, under conditions prescribed by permit, but still maintaining the strict precautions needed to prevent the production of marketable honey during the period of risk.

Hives can now be managed for honey production for the greater portion of the year in the Bay of Plenty and Coromandel restricted areas, under conditions which are safe to the honey-consuming public. In addition, commercial beekeepers may be given approval to use the restricted areas during the period of risk for specified beekeeping operations other than that for honey production.

Two such specialist beekeeping operations have been established in the Bay of Plenty restricted area in recent years, one for the breeding of bees, and the other for the raising of nuclei colonies.

These enterprises clearly demonstrate the alternative ways in which the restricted areas can be safely utilised during the period when toxic honey could be produced.

Pollination of kiwifruit

Undoubtedly the greatest beekeeping development in the Bay of Plenty in recent years has been the boom in kiwifruit production. Honey bees are the major pollinators of kiwifruit. The beekeeping industry has responded rapidly to this development.

Just six years ago less than 500 hives were used for pollination purposes. Last season over 5 000 hives were moved onto Bay of Plenty orchards for kiwifruit pollination. It can be anticipated that 20 000 hives will be required within the next five years, based on current plantings.

Much of the success of the kiwifruit pollination service can be attributed to a most effective grower-beekeeper liaison. Many of the earlier problems, and unknowns, have been resolved. However continuing liaison is essential.

In such a quickly expanding industry, involving many newcomers (beekeepers as well as horticulturalists) and also involving rapidly developing techniques, it is essential that avenues of dialogue remain open.

Kiwifruit growers must have an appreciation of the beekeepers' concerns and requirements – the dangers of pesticides toxic to honeybees; the access to and positioning of hives. Beekeepers must have an appreciation of the kiwifruit growers' concerns and requirements – stocking rates; spray programmes etc.

OBITUARY

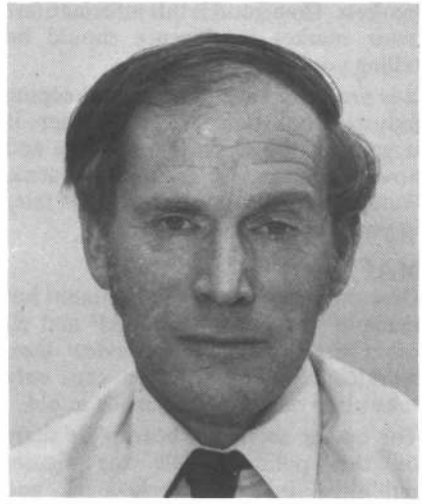
MAF's deputy director (horticulture), of the Advisory Services Division, Mr Iain Forbes, died recently while on long service leave in Hawaii. He was 54.

Mr Forbes made a major contribution to the development of horticulture in New Zealand over the last 30 years, said Mr John Hercus, director of the Advisory Services Division.

"Mr Forbes, particularly since his promotion to head office in 1968, had worked quietly and efficiently to bring together the various sectors of New Zealand's booming horticultural industry.

"At the time of his death he was closely involved in plans to radically alter MAF's role in the horticultural field. He had just set in train a new programme which, for the first time, would take horticultural advisers beyond the farm gate and involve them in understanding processing and marketing aspects of the horticultural industry.

"His contribution to this new policy will have a major impact on the development of horticulture over the next few years."



Mr Forbes' career with the public service began in 1948, when he joined the DSIR as an assistant vegetable research officer. In 1950 he graduated from Lincoln College with a Master of Agricultural Science degree. He joined MAF in 1955 as an assistant vegetable specialist, and later became a horticultural advisory officer.

He became chief advisory officer (horticulture) in head office in 1968, and was made assistant director in 1971. In 1976 he was promoted to deputy director.

Paul Marshall, NBA president, said that he was doubly distressed by Iain Forbes death. He had been associated with him in MAF in past years and had recently welcomed him to the NBA annual general meeting in Tauranga, where Iain had given the opening address to the conference.

"His wise counselling was held in high regard not only by board members, but also by beekeepers throughout New Zealand. He will be sorely missed, and I extend all beekeepers' sympathy to his wife and family," said Paul Marshall.

REMITS CONSIDERED BY THE 1980 CONFERENCE

"TO BEE OR NOT TO BEE?"

Remit 1 **Waikato**

That this conference request the president to set aside a time for conference to discuss in general terms the future policies and methods of marketing honey.

Russell Berry/Jansen

Passed unanimously.

FUNDS FOR ALL

Remit 2 **Otago**

That this conference request its executive to ensure that the suppliers' funds held by the HMA be retained for the benefit of all suppliers in the event of the HMA giving way to a co-operative.

Heineman/Lyttle

Mr Wilkinson suggested that the remit be left on the table until after the remits had been considered. Mr Ian Berry was against this and thought the matter should be aired at once. By a vote of 6:1 the motion was left on the table. When it was uplifted there followed a motion to withdraw it. This was strenuously opposed by Russell Berry who said that Waikato wanted the opinion of the meeting. The vote to withdraw it was defeated 6:7. An amendment moved by Mr Penrose that the "suppliers' funds" be changed to "industry funds" and "all suppliers" be "all sections of the industry" was passed 12:1. The motion in its amended form was then put and passed 12:1.

MONEY FOR JAM

Remit 3 **Canterbury**

That the executive give consideration to updating the branch capitation to a realistic level, to enable branches to function adequately.

Note: The branch capitation at present is 5 per cent of the gross hive levy income.

Penrose/Scott

Mr Penrose said that the branches were in the same situation as the executive had been in at times with regard to finance. Strong branches meant better delegate votes, but one branch had not even been able to afford supper after a meeting. As the national body was financed through the hive levy, it should maintain a rolling balance of $500 for branches.

Russell Berry suggested that "this conference" should be "the executive". This was agreed to.

The remit was passed 11:0.

LEVY FOR BREAK EVEN

Remit 4 **Canterbury**

That in view of the adequate surplus of funds currently held on fixed deposit, this conference request that the hive levy be adjusted to equate actual net cash requirements of the NBA, thus avoiding any further increase in this surplus.

Penrose/Scott

Mr Penrose said that the finances of the executive were in a strong position and there was no need to "empire build". Canterbury would consider that $15 000 to $20 000 should be sufficient for the executive for a cash reserve. There was no need to add to the already strong position and they advocated a flexible hive levy system.

Russell Berry said that Waikato opposed the remit as they did not know what the executive needs might be.

Mr Stuckey asked what the carry-over was and on being told that it was $17 500, said he did not think it was excessive as there was a state of flux until there was a decision on the HMA.

Mr Braid said that he couldn't see constant adjustments to the levy working, and suggested that the excess funds be put to revenue earning ideas, such as stickers or T shirts, for sale.

Mr Cray said there was a built-in profit for emergencies, and furthermore the budget had to be approved by the minister. He thought any carry-over could be used in such things as research into tutu for example.

Mr Jensen did not want to see the levy being used for periphery activities as it was already costing him $10 a week.

In reply Mr Penrose said the intention of the remit had been misunderstood and it had been Canterbury's intention to make sure the executive did not build a large empire, not a criticism that the executive did not know their needs.

The remit was passed 8:5.

CHAIRMAN'S HONORARIUM

Remit 5 **Executive Committee**

That the chairman's honorarium be increased from $500 per annum to $800 per annum and that the honorarium be adjusted annually in line with general wage orders.

Lyttle/Cloake

Russell Berry said that Waikato would like the remit amended by deleting all after "honorarium be . . ." and " . . . reviewed annually" be substituted. This was agreed to and the amended remit passed unanimously.

WAIT AND SEE

Remit 6 **Far North**

That the Ministry of Agriculture and Fisheries be asked to amend the requirements of the Annual Declaration form of hive inspection to cover the number of colonies with disease and in which apiaries; the total number of colonies owned and any new sites not already registered.

Note: This was carried as Notice No.4 at the annual conference in 1977. At the 1978 annual conference the Far North branch requested reasons why Notice No.4 on the order paper of the 1977 annual conference which was passed unanimously was not implemented. Since then the annual declaration form of the MAF has not been amended and, although there have been changes in regulations, the above has not been included.

Haines/Gavin

After discussion and explanation by Mr Grahame Walton that an order in council was needed to change the requirements, and that a gradual standardisation of forms was being tried in Northland and would be appraised next year, the remit was withdrawn for a year on the motion of Mr Ian Berry.

INFORMATION ON B.L. OUTBREAKS

Remit 7 **Waikato**

That this branch request the MAF supply beekeepers and

exporters of honey with current information on B.L. outbreaks on request.

Note: Due to the necessity of having to supply phytopathalogical certificate to some countries, it is necessary to have this information before packing.

R. Berry/Lorimer

The remit was amended to substitute "beekeepers and exporters of honey" for "exporters" and carried 11:12.

OPEN BUT DISCREET

Remit 8 **Canterbury**

That conference requests the Ministry of Agriculture and Fisheries to conduct a bee virus survey as soon as possible, and to publish the results.

Penrose/Jeffries

The remit be amended to read "... and to make the results known". A further amendment to "... make the results known within the industry only" by Mr Rowe, was lost. Delegates felt it was better to be frank about any problem and rely on MAF not to give it unwarranted publicity.

Carried unanimously.

POLICY ON DISEASE OUTBREAKS

Remit 9 **Otago**

That this conference requests its executive to obtain from government its policy to deal with an outbreak of European brood disease. In particular what area would be called a disaster area and what compensation would be paid for healthy hives destroyed in those areas.

Heineman/Dickinson

Mr Walton explained that if a suspected outbreak occurred a blanket restriction on movement would be placed over an encompassing area until the disease had been identified, regardless of whether it was schedule one, two or three. It was resolved to leave the remit on the table, until remit 11 had been dealt with.

DISEASE SCHEDULE CHANGE

Remit 10 **Southland**

That this conference recommends that European brood disease be transferred from the second schedule to the first schedule of the Apiaries Act.

Note: Under the second schedule there is no compensation payable.

Withdrawn.

AGAIN

Remit 11 **Otago**

That this conference request that European brood disease be included in the first schedule.

Heineman/Dickinson

Mr Walton explained that under the Act, a committee would establish the value of the hive and payout would be on market value. Mr Forbes said the problem was to establish the difference between European and American brood. The government policy in determining whether European brood be a first schedule or not depended on whether or not the hives would need to be wiped out. Mr Walton then said that adult diseases were scheduled one, but brood diseases were not, and there would need to be a change to the Act to alter it. In Australia efforts to contain it had failed and they were now prepared to live with it. The problem was to differentiate between American and European. In answer to a question as to how long it would take to change the Act, Mr Walton said the current Apiaries Bill 1980 was only rated class three in urgency and this would not be on the fast track either.

The remit was passed unanimously.

Remit 9 was then uplifted and passed 11:1 with one abstention.

MORE MAF STAFF REQUESTED

Remit 12 **Canterbury**

That this conference adds its support to the Canterbury and Hawkes Bay branches in their request for the urgent increase of apiary section staffing.

Note: Branches' attention is drawn to the fact that Ministry of Agriculture and Fisheries apicultural staff has been reduced from thirteen to eight; and the research staff at Wallaceville from two to one. This reduction is significant in the light of projected large areas of blackcurrants and the potential requirement of approximately 22 000 hives for pollination in the South Island. The associated movement of hives for this operation and the high concentration of hives in honeydew areas have increased the risk of American brood disease being transferred and will accordingly require further assistance from the MAF apicultural staff.

Penrose/Ashcroft

An amendment by Russell Berry substituting after "... branches in" "... need for departmental personnel by relocating their agricultural officer in Wellington and one from Auckland to the Hawkes Bay and Canterbury areas" was lost. Russell Berry had said that he felt the government was unlikely to make more men available to the beekeeping industry at the expense of the taxpayer. Mr Stuckey said that unless something was done the Tauranga man would have his area extended to Gisborne putting him under severe pressure to serve so large an area.

The remit was carried unanimously.

PART-TIME ADVISORY OFFICERS

Remit 13 **Otago**

That the ministry investigate the feasibility of using part-time advisory officers as well as part-time inspectors without reducing full-time advisory staff.

Heineman/Dickinson

Mr Jarsen said he thought men should only be employed voluntarily, and should not go onto the State Services payroll. He was against the remit. Mr Rowe said he did not object to part-time inspectors but didn't want to see untrained advisers. Mr Forbes said he was happy to look into part-time staff; it could save staff and allow re-direction of other men.

The remit was passed 12:1.

SLAYER OF WASPS AND BEES

Remit 14 **Otago**

That the MAF appoint a full-time hive inspector, his duties to include seeking and destroying wild hives and wasp nests in the Otago district.

Note: It is felt that wild hives and wasps are on the increase in Otago and that a full-time inspector would eliminate these pests very quickly. Wild hives in particular which are a menace in the transmission of disease and obstruction to successful queen breeding.

Withdrawn.

CYNOGAS REPLACEMENT NEEDED

Remit 15 **Waikato**

That the MAF be asked to carry out research into a suitable material to replace Cynogas.

Comment: Is there a substance that has a kill time as short as that of Cynogas? Do not want to contaminate the wax.

Russell Berry/Robinson

Passed unanimously.

NO HONEY FROM ABROAD

Remit 16 **Bay of Plenty**

That honey be a prohibited import.

Explantion: The present legislation does not specifically state that honey should be a totally prohibited import item. The above remit we feel truly expresses the desire of the industry.

After discussion and Mr Walton explaining that honey could not be imported into New Zealand except from Nuie for transhipment from bondage, or heat treated for manufacturing. Importation of bees or equipment required prior consent. Mr Penrose suggested no official ban be imposed, it just be made too difficult to fulfill the requirements. Mr Russell Berry said he was against change as there may be a need to import at some time in the future.

The remit was withdrawn.

BRANDING HIVES TO DETER THEFT

Remit 17 **Bay of Plenty**

That this conference recommends to beekeepers that they use their MAF registration number when branding their hives to assist the police with the identification and recovery of stolen hives and the conviction of the thieves.

Consideration could then be given to the publication of the name of the offender in the N.Z. Beekeeper should this be deemed desirable.

Mossop/Penrose

Mr Mossop felt that there may be legal difficulties with publishing the names of offenders.

The remit was passed unanimously.

VIGILANCE FOR PROTECTION

Remit 18 **Waikato**

That the beekeepers be made aware of the immense vulnerability of the beekeeping industry to theft and that special efforts by the beekeepers be made because unchecked theft could ruin the industry.

Russell Berry/Robinson

Mr Berry said that there was great difficulty in getting prosecutions and the trend of thefts of hives must be stopped at once.

The remit was passed unanimously.

Remits 19 and 20 were taken in committee.

EXPORT QUALITY ALL THAT IS DESIRED

Remit 21 **Otago**

That this conference is concerned at the apparent lack of quality control in the proposed draft of honey export regulations.

Heineman/Dickinson

The basis of this remit had already been aired in Mr Walton's report to the meeting. The quality standards for export honey would be those required by the importing country and the MAF would enforce them.

The remit was lost 4:9.

FORLORN HOPE FOR MORE LEVY

Remit 22 **Bay of Plenty**

That all beekeepers pay five cents per hive towards funding an eradication programme of A.F.B.

Stanley/Mossop

Mr Stanley said that with the rundown of MAF officers and increasing concentration of hives particularly in horticultural areas, the beekeeping industry should look to picking up the tabs themselves for any eradication programme. Mr Penrose suggested the best method might be for beekeepers to blitz high risk areas themselves for several days at a time.

The remit was lost 1:12.

NO PAROCHIALISM OVER EFFLUENT DISPOSAL

Remit 23 **Waikato**

That the appropriate authority be asked to investigate and recommend a method of disposal of honeyhouse effluent particularly in areas of heavy clay soils.

Stuckey/Cloake Jnr.

Mr Cloake wondered if it was a countrywide problem and if so shouldn't a solution be found at national level. Mr Grey said that one would have to abide by the regulations of the local authority. Mr Stuckey said he was very tentative to consider it a problem to bring to the local authorities' notice for fear of the regulations that might ensue. Various delegates then cited their own experiences and it was resolved to get more general experience.

The remit was carried 7:4.

ACHING BACKS NEED SYMPATHY

Remit 24 **Waikato**

That this industry supports that chiropractic treatment by registered chiropractors for accidents be covered by the Accident Compensation Commission.

Russell Berry/Robinson

Mr Berry said it was a hazard of the industry and that their levies to the ACC deserved its recognition of chiropractors. Murray Reid a Waikato member had tried strenuously to get the remit enlarged to include recognition of massage parlours too, but the fact finding committee had returned too late to vote.

Mr Jansen though that adding to the benefits from the ACC only increased costs.

The remit was carried 12:1.

WILL THE SNOW BE SKIABLE?

Remit 25 **Southland**

That the 1981 conference of the association be hosted by the Southland branch.

Booth/Clissold

Mr Dickinson moved that "branch" be deleted and "and Otago branches at Queenstown" be added. This was agreed to 10:3.

Several members also pointed out that it would be cheaper for those in the north to attend a conference in Sydney.

The remit was carried unanimously.

NOTICES OF MOTION

No. 1

That the conference requests the government to give all possible assistance to the establishment of a sugarbeet industry in Canterbury.

Bartrum/Lyttle

Mr Bartrum thought the competition of a sugarbeet industry would stabilise the price of cane sugar, and as one third of New Zealand's requirements were bought on the world market, the proposed industry could hardly be the deathknell of the Fiji industry.

Mr Russell Berry suggested that Mr Alan Ward be asked for an opinion.

Mr Ward said that he thought that there were many things against it, the NAFTA agreement with Australia, the closeness of Fiji, the high inputs required in it, the government assistance it would require, and the possibility that such an industry would end up in the same predicament as the tobacco industry.

The voting on the motion was split 6:6 and it was left for the executive to investigate.

No. 2

That this conference recommends that the HMA requests the minister of agriculture to appoint an independent arbitrator acceptable to the steering committee of the proposed co-operative, the HMA board and NBA executive to determine how the assets of the HMA were established and to indicate how the assets should be dispersed."

Cloake/Lyttle

There was much debate as to whether the arbitrator would be acceptable or not to the industry, whether he would be independent, and whether his findings would be binding. Mr Hayman pointed out that if the arbitrator the government appointed reached a finding that the industry wouldn't recognise, the government would make its own decision.

The motion was passed unanimously.

No. 3

That this conference recommends that the HMA assets should not be loaned to a marketing co-operative at below commercial interest rates.

Russell Berry/Stanley

There was a debate as to whether this was in order, but was finally accepted when Mr Russell Berry pointed out that anything brought up in the chairman's address could be put on the order paper. Mr Berry said that a packer would be at a great trading disadvantage with a co-operative working on money borrowed at one per cent. He said that a great deal of money had gone to the HMA in the past from Waikato, and so the funds should go to the whole industry, not to a section.

A whole barrage of ammendments and counter-ammendments followed with the final outcome being *"that this conference recommends that HMA assets should not be loaned to a marketing co-operative at below Rural Bank interest rates other than those monies needed to buy the packing facilities and buildings in the South Island."*

Mossop/Bartrum

This was passed as the motion 31:23.

No. 4

That this conference accepts the principles of the chairman of the HMA's plan and requests the board to take appropriate action.

Hale/Bird

This motion was opposed by five votes and so didn't get on to the order paper.

The sitting chairman Mr Paul Marshall (Lyttle/Clissold) was elected after a challenge from Mr Stuckey (Herron/Bird). Mr Stuckey was then elected vice-president (Herron/Robinson).

Summer's elixir for bees

by David Willams

In New Zealand we tend to take water supply for granted but an article on suburban beekeeping in the American Bee Journal, November 1976, includes the provision of water within seven metres during the summer months as one of the conditions of the six-point charter outlined there.

Obviously the hotter the climate the more vital water becomes to the bees just as the hotter the day, the greater the need.

Here is what you do to the bees with water. They themselves use water for a number of purposes – mixing with brood food, diluting honey, cooling the hive by placing it in the dimples of the brood cappings and evaporating it from there. There can be few better examples of the intelligent use of a natural resource to achieve a desired effect.

Why, then, when I provided a constant drip running down sacking on a sloping board, did the bees remain completely disinterested in all the weeks I had it there, even on the hottest days? Admittedly there are plenty of goldfish ponds, swimming pools, even a couple of streams, all not too far away, but why then should the bees be so attracted to any part of the lawn that has had the sprinkler on? Ungrateful insects!

presented by Grahame Walton chief advisory officer (apiculture), Ministry of Agriculture and Fisheries.

In his address to this conference Mr I.G. Forbes, deputy director (horticulture), outlined the ministry's position regarding it servicing the beekeeping industry, as well as servicing the other sectors which comprise our farming, horticultural and fishing industries.

The advisory services division's responsibilities to the beekeeping industry includes providing an effective advisory service, certifying export shipments of bee products, maintaining a quarantine service to prevent the introduction of harmful diseases, pests and undesirable genetic characteristics; and ensuring that beekeepers meet their obligations in controlling bee diseases.

The division sees its principle function as assisting and encouraging primary producers achieve increased production, particularly export production.

Mr K.W. Simpson, presently apicultural advisory officer in Palmerston North, will in August, take up the position at Oamaru created by the resignation of Mr V.A. Cook. Mr Cook has resigned to take up an important post as beekeeping adviser in the United Kingdom.

Earlier this year Mr T.G. Bryant, apicultural advisory officer in Gore, was selected as the division's candidate in an advisory exchange scheme maintained with Canada Agriculture. Mr Bryant is stationed in Alberta and will return next March.

The ministry has been obliged to reduce the number of staff servicing apiary districts from nine to eight; the last change took place in 1973. A recent gazetted amendment to the apiary registration districts, has extended the Tauranga district to include East Cape, Gisborne and the Wairoa areas. Taranaki, Manawatu, and Hawkes Bay will continue to be serviced from Palmerston North.

During the past three years the ministry has trained and employed over 30 field officers and livestock officers to assist district apicultural advisers with the examination of honey for export and check inspection of hives.

Beekeeping statistics

Beekeepers, apiaries and hives: As at May 31 1980, there was a national total of 5 217 beekeepers maintaining 19 450 registered apiaries and owning 233 810 hives.

Beekeeper category	Beekeepers	Apiaries	Hives
owning 1 – 50 hives	4792	6780	25 809
owning 51 – 500 hives	301	4230	57 805
owning more than 500 hives	124	8440	150 196
Totals	**5217**	**19 450**	**233 810**

Interest in beekeeping as a hobby continues unabated. There has been a 14 per cent increase in the number of registered beekeepers owning up to 50 hives this past year; a 43 per cent increase in the past three years.

The number of beekeepers owning between 51 and 500 hives also shows a significant increase: 10 per cent over the past year; 39 per cent over a three year period. It can be anticipated, that from within this group will emerge a new generation of commercial beekeepers.

There has been little change in recent years in the number of beekeepers owning more than 500 hives.

The honeycrop: The honeycrop for the 1979/80 honey season was 7 489 tonnes; approximately 1200 tonnes above the average for the past 10 years. Although most North Island districts produced below-average crops there was a record South Island honeycrop of 4 600 tonnes, partially due to exceptional yields in Canterbury and Nelson apiary districts.

New Zealand's total honey production for the last three years has been:

1978 – 8 269
1979 – 6 474
1980 – 7 489

For the year ended August 31 1979, the ministry graded 1 850 tonnes of extracted honey for the Honey Marketing Authority.

Private exporters, exported 127 tonnes of extracted honey, 172 tonnes of comb honey, and approximately 225 tonnes of honeydew honey.

American brood disease: The level of American brood disease (*Bacillus larvae*) has shown a slight decline this past year. During the 1979/80 season 722 apiaries and 1 578 hives were found to be infected with American brood disease.

Beekeepers reported 535 apiaries and 1 097 hives infected with American brood disease. The ministry's check inspection programme has been maintained at the relatively high level of 14 per cent of all apiaries. This programme has been assisted by the use of field officers and livestock officers in a number of districts, as well as the continued employment of beekeepers as part-time inspectors.

Beekeepers should continue to report all suspicious maladies within bee colonies. New Zealand is free from many bee diseases, pests, and undesirable genetic characteristics affecting beekeeping industries in other countries. To assist beekeepers in recognising these maladies the ministry has issued a new publication in the AgLink series (FPP428). The publication describes the nature and symptoms of a number of bee diseases not present in New Zealand (including acarine, varroa and European bee diseases) and outlines control measures to prevent their introduction and spread.

Beekeeping legislation

Proposed amendment to the Apiaries Act 1969: At present with parliamentary counsel is a proposal to amend the Apiaries Act 1969. This proposal, prepared by the ministry and discussed with and supported by your national executive, suggests a number of mainly procedural changes to the Apiaries Act. These include a new definition for honey; improving the system of allocating beekeeper code numbers; simplifying the requirements in respect of the beekeepers' annual statement of inspection; modifying the conditions of the permit to keep bees in a restricted area; and increasing the penalties for offences under the act.

Your association will be given a further opportunity to consider this bill upon its introduction to the house. Unfortunately this may not be until next year.

Honey export regulations: Also with parliamentary counsel at the present time are draft Honey Export Regulations which are intended to replace the current 1950 regulations. These proposed regulations have been considered by beekeeping industry groups and have received majority support.

As proposed, an exporter, if he so chooses, may export honey without

government certification. If he requires certification the proposed regulations provide the basis upon which honey will be inspected and certified by the ministry. The regulations are sufficiently flexible as to maintain and stimulate the export opportunities for New Zealand honey in the face of increasingly demanding quality standards set by importing countries.

To be certified for export under the proposed regulations the honey must still be free from foreign tastes, odours, fermentation, high moisture, adulterants or any other organic or inorganic substance foreign to the composition of honey; but otherwise the requirements to be met are those related to the specific certification standards set by importing countries.

Procedures: The ministry's apiary registration system has been the object of a study by the organisation and methods section of management services division. As a result of this study a number of improvements to the existing apiary registration system are planned.

When the proposed Honey Export Regulations become law there will be some changes in the ministry's sampling and certification procedures. Mr G.M. Walton, chief advisory officer (apiculture) will be prepared to discuss these procedures with industry groups involved in the exporting of honey, during the next few months.

American brood disease levels in apiary districts (1979)

Apiary district	No. of diseased apiaries	% diseased apiaries	No. of diseased hives	% diseased hives
Auckland	131	3.8	235	0.85
Hamilton	117	4.8	211	0.55
Tauranga	60	3.6	164	0.87
Hastings	43	2.8	86	0.41
Palmerston North	37	1.9	120	0.66
Nelson	91	6.4	170	1.19
Christchurch	40	1.6	135	0.41
Oamaru	98	3.9	206	0.62
Gore	105	5.3	251	0.84
Total	**722**	**3.7**	**1 578**	**0.67**

Advisory activities

Apicultural advisers have again provided a wide range of advisory services to beekeepers in their districts during the past year. In addition to normal advisory activities, including individual advice; arranging, attending and addressing meetings; and preparing articles for publication; ministry staff have carried out a number of other advisory projects.

Beekeeping courses have been held at the ministry's Flock House and Telford training institutes. Other courses are planned. Encouragement and assistance has been given to the establishment and operation of new beekeeping clubs.

Apiary section staff have reviewed beekeeping publications and have identified a number of topics which should be prepared or updated. In due course these articles will be published in the ministry's AgLink series.

One important Flock House course proposed for next year is intended for the leaders of the beekeeping industry. The objectives of this course are to review the current state of beekeeping in New Zealand, examine its future directions and goals, and to identify the factors which are limiting the industry's development.

A FRESH START

Part 9
Queen rearing for amateurs
Simple cells

story
David Williams

photos
Allan Warren

THE LAST eight articles have dealt with queen rearing for those amateurs whose operations could be described as truly small-scale.

This section will go back to the beginning and clear up a few points in the earlier articles that have come out in conversations and correspondence.

Books

A good book on queen rearing is a good investment even if you think these articles will give you all you need, I will only write from my own experience.

Do not buy Morse's book. It is inadequate, as all his books tend to be. Laidlaw and Eckert's is excellent, one I enjoy reading time and again, and I have also just received Harry J. Laidlaw jnr's "Contemporary Queen Rearing" which seems sufficiently different to the earlier one to make its purchase worth while.

That should be enough for a start, although I am looking forward to seeing Tage and Mrs Johansen's booklet.

Replies:

Just two points that have been brought up for discussion.

Firstly I have been chidden on showing a photo of cells "too far apart" in the September 1979 issue. Guilty, M' Lud! Cells on wooden bases on bars should be as close as the bases will allow. Cell cups without bases will be joined together by the bees if too close but there should certainly not be more than 15mm between.

They should also be stuck on a good, thick layer of wax on the bar so that they can come off with a good "shoulder" to assist handling and insertion. Cells should also be concentrated on the centre of the bars where the bees will give them the best of attention.

Secondly in the same issue I recommended discarding a few larvae and using the milky fluid in which they have been resting to 'prime' the cell cups. It has been suggested that the composition of this can change with the age of the larvae and that what goes in may not be suitable for the larvae grafted.

Possibly, also, brood food placed in the base of the cups is removed by the bees whatever its composition or suitability.

I should have been more specific and said 'discard several larvae of the age you are going to graft' (which should be the youngest possible – 12 hours old is ideal). Use brood food from these', suitable or not, the milky fluid may still perform several valuable functions such as keeping the microclimate within the cup at a suitable level, or it may attract bees to the site where they will instinctively care for the larva there, or perhaps even persuade the bees that, if accompanied by food, the larva has a right to be there.

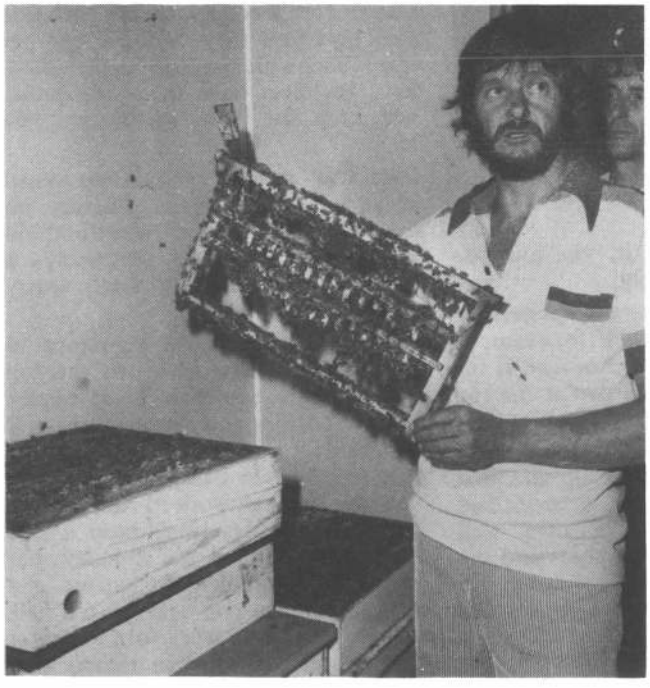
Any more points for discussion, please send them in.

Simple cells

Swarm cells

The very simplest and "most natural" way of raising queen cells (if there is such a thing) is to let the bees do it for you by simply waiting until you find sealed queen cells in your hive or hives and then using them.

The advantage claimed for this is that you "are going with the natural rhythm of the season" or some such paraphrase, but there are also certain distinct disadvantages:



Bruce Stanley with well-developed frame of queen cells.

Caitlin Williams about to remove frame with queen.

- The supposition that you are reliable enough in your examinations to come across the first cells in the first hive to rear them;
- the fact that by using this method you are breeding from the hives that show most tendency to swarm, resulting in a slow acceleration to disaster;
- it is otherwise quite unselective as to quality;
- it allows the bees to dictate timing;
- these disadvantages mean you are suddenly faced with the necessity to sub-divide, or make up nucs, or generally panic in some way.

Emergency cells

One step up from swarm cells is one of the systems noted in "Beekeeping in New Zealand", whereby the queen is simply removed from your best hive and the bees allowed to make emergency cells.

I found this worked quite well in my early days, particularly when one new comb full of eggs and newly hatched larvae was raised to the middle of the second brood chamber with a frame of pollen and honey either side, or everything else is put to the bottom, or the queen being either killed off or taken off in a two or three frame nuc.

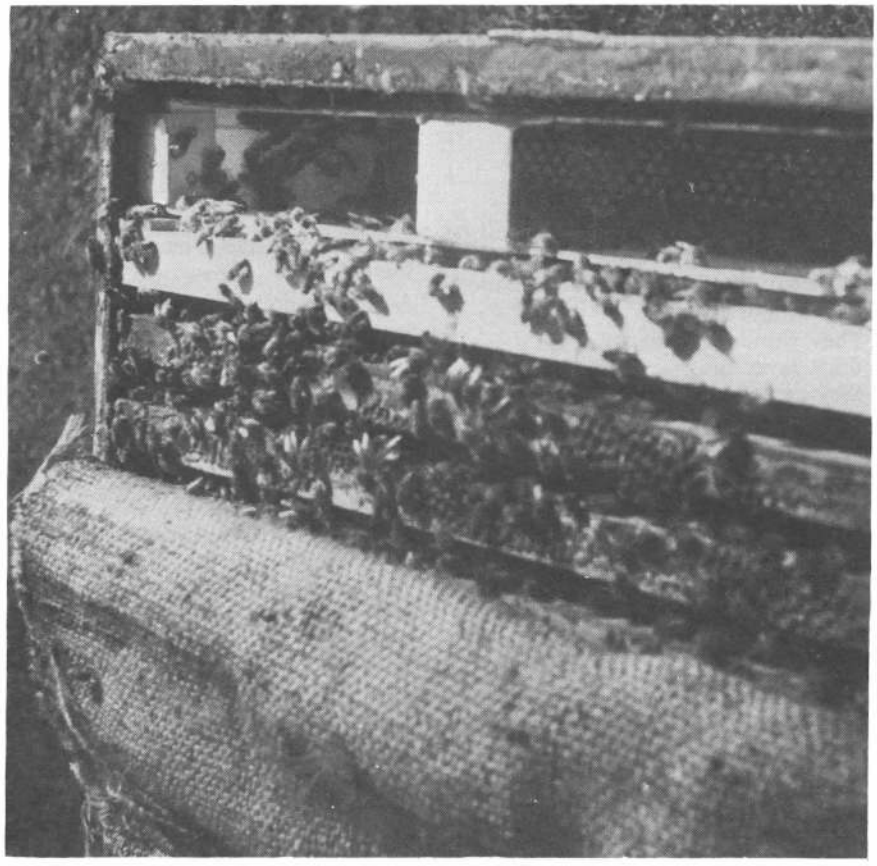
Even though this does tend to deplete the hive, which is just what you don't want, I routinely used to get eight to 12 good cells out of it, though it did mean hacking the frame around.

These two systems may not give you the **best** cells, but they certainly give useable ones with the minimum of equipment. We will move slightly up to marginally more sophisticated methods next time.

---

by David Williams

Feeders and feeding



A strong hive will often empty feeder overnight. . . .

HOW MANY times in spring have I been asked by some proud beginner if his or her hive is going to swarm. Frequently I am able to reassure the owner.

"No," I say. "It isn't going to swarm, ever. It's going to starve to death first!"

Feed a lot, feed early, feed in a form bees can take easily.

It is always the biggest and best colonies that starve to death – get a cold snap in October or November and they can die out overnight. The minimum is laid down as the equivalent of two full frames of honey. This means that if you examine a hive and find only this amount or close to it, you must do something immediately.

Two frames are obviously merely an arbitrary minimum and if, for example, your hive had ten frames of feed at the end of August and has two at the end of September, you are in trouble.

Remember in your autumn closedown that bees tend to move up and that what you regarded as a well-filled two-brood-chamber hive may well have the top box full of bees and the bottom full of nothing. Remember our motto – "If you can lift it, it's too light". Remember also that the worst shortage occurs just when a few spring flowers struggle out and give a false impression of plenty.

I can feed my hive dry sugar in moderate quantities because they are on my front lawn where I can keep a daily eye on them but ideally the bees should progress at their own pace with ample sealed stores to draw on.

So feed heavily and decisively and keep an eye on them thereafter. And don't think one miserable 1.5 kg packet of sugar is going to be enough for them. They will need at least 20 kg to get them through from September to December except in very favoured localities and that means 12 to 15 of those little packets of sugar per hive. This should be fed as fast as possible, as a 1 : 1 syrup or stronger, so that they can get it down and stored away. The commercial people use 4 gallon tins cut lengthways put in a spare super on top of the hive, the half tin being filled with syrup and a few handfuls of twigs or bracken thrown in for the bees to cling to or some similar brutal but effective method.

While for the amateur a good plastic feeder (or feeders – there's no rule that says you may only use one per hive) filled with syrup and replenished, until the bees have their full quota, will keep the bees healthy and you happy.

But you should always use small sticks or other debris floating on the top to give the bees foothold and even then there are always a few inevitable deaths – don't worry about them too much.

Dry sugar is an alien substance to bees – drop a few grains in the top and you soon see them being carried out the bottom and discarded. Even if you feed dry sugar rather than syrup, it is still best to dampen it a little so that the bees can work it. And remember that dry sugar may keep a hive from starvation, if you're lucky, but that hive is unlikely to expand and progress at the rate a syrup fed hive will. Sugar is hard work for the bees – they have to bring in water with which to dissolve it before they can use it.

FROM THE COLONIES

SOUTH CANTERBURY

June proved a difficult month for some local beekeepers, two major floods caused a few beekeepers to lose hives considered safe and some had hives partially submerged for a short period. A situation such as this emphasises the necessity to ensure that in your insurance policies claims can be made in these circumstances.

The weather has been much better since these floods, July was quite a good month. Short spells of fine warm weather allowed bees to fly and in some cases gather a little pollen. There are indications that the hives should open up in good condition in early spring.

Two branch meetings were held during the winter, both were well attended and it is interesting to note for the first time South Canterbury did not sponsor remits at the annual conference. This is indicative of the present changing market scene and the possible changes which may be made in the industry. This is a situation the local beekeepers are vitally interested in as South Canterbury is the country's most intensive high production bulk supply area.

Should the present predictions regarding the extent of the blackcurrant industry prove to be near accurate, then Mid and South Canterbury can look forward to being required to provide a pollination service on a similar scale to that of the kiwifruit industry. While providing an alternative source of income it will also create many problems and already beekeepers are looking at ways of organising some manner of control of the whole pollination scene.

We were fortunate to have Mr Graham Kleinschmidt, tutor in apiculture at Queensland Agriculture College, address a well attended meeting following his attendance at the annual conference at Tauranga. What good value he was, he spoke our kind of beekeeping language, was able to make his point without lengthy explanation and we knew what he was telling us.

He is the type of person we require more of, and it is a great pity he was not able to spend more time and address more meetings in this country. He left us with something to think about, especially bee breeding.

Harry Cloake

NORTH OTAGO

There has been no improvement over the last 12 months. One flash flood a couple of months ago, resulted in the loss of approximately 100 hives going down the river. However, when we think of those on the Taieri plains and West Otago we count our blessings.

It looks as if spring is here, with all the blossoms coming out even the willows are starting to change colour. We only hope that the willow flow will be better this year as feeding sugar can be very expensive now.

One thing about the winter months are that they give the chance to get all odd jobs done and the most essential is melting old combs and cleaning up frames. Those of us with steam plants have been quite busy helping out those not so fortunate as to having a boiler.

Most of us are well up with our work and are just waiting for the weather to improve and we'll be out for that first quick look to see how the bees have come through the winter, but oh for some fine weather.

George Winslade
Oamaru

FAR NORTH

The winter months in the Far North can be summed up in one word: wet! Although some of this is due to a hangover from a wet spring last year and an unusually wet summer, it seems that we have had more than the normal amount of rain. However, although the bees may be in recess, the Far North branch still turns out enthusiastically to meetings, and educative discussions.

One of the highlights of the year's programme was a visit in July from our apiary instructor, Brian Milnes. This was particularly lucky in view of the government's drastic cuts in travel and transport by department personnel (and that, is a matter we feel the NBA executive could do well to take up with government). Incidentally we would welcome a visit from a member of the executive of the NBA (we haven't had one since 1973), to show the educational aims of our branch meetings.

The main purpose of this special extra visit by Brian was to show coloured slides of and talk about American brood disease. As Brian commented, we in New Zealand are very fortunate that this is the only serious disease in bees as yet, and this puts us in the advance position of being able to export queens to other countries.

However, there is no room for complacency and, as Brian pointed out, apathy and ignorance are the main factors in allowing American brood disease to continue. Particularly the former, in which professional beekeepers can be just as culpable as hobbyists. Brian projected a very graphic collection of slides, after giving an introduction, and a very full discussion followed the showing.

Those present at the meeting were subsequently in no doubt about what to look for and how to deal with the disease.

We were also fortunate to have Malcolm Haines who with his lifetime experience of beekeeping coupled with Brian's expertise and theoretical knowledge gave the whole range of points to the meeting which was well publicised.

Two films were shown in addition to the coloured slides; 'Bees for Hire', showing the importance of honeybees as pollinators in agricultural crops, especially alfalfa, and the second film, 'When Bee Meets Bee', was a British film showing the behaviour of guard bees at the entrance to a hive and also the behaviour of bees within the hive. A third film to be shown by Brian Milnes was grounded at Dunedin by the floods.

In the previous week we had our usual monthly meeting at which we saw two films from the National Film Library. One film, in black and white, was about bumble bees. It showed the full life cycle of the colony, from the hatching of the worker bees, their work of nest-building (mostly in the ground), honey-gathering and storing, and feeding the larvae. At the end of the season, all the bees die except the young virgin queens which winter over to begin each new colony the following spring.

The second film was a half-hour colour film from Japan, 'Secret in the Hive', showing the full life cycle of the queen bee, worker bee and drone in a honeybee colony. Particularly horrifying was a Japanese wasp, many times larger than the honeybee, which is capable of wiping out a complete hive of thousands of bees.

At our meeting in August we had another session on mead making, this time with the acknowledged expert in the Far North Jack Ward, whose expertise in mead making is so

noted that he has often been asked to help develop the brew commercially. This was a lively session indeed!

The pussy willow is starting to bud, daffodils are in full bloom, so with a few hot days we might believe we are into springtime at last.

Wendy MacPherson

BAY OF PLENTY

The branch received many congratulations for its successful conference organisation. The concluding social evening was a tremendous success, highlighted by our Tauranga based Maori Concert Group. This singing-action group was a knockout.

Hives benefited from a long mild autumn. Subsequent 5-8 deg C. frosts and cool days brought activity to a stand-still and delayed the build up from heath, brush, wattle and tree lucerne. Well-placed strong hives are now showing white wax from these winter sources.

The rewa rewa, our November major source, is reasonably well flower budded. Perhaps this coming season is the one we've been waiting for.

Our annual pollination committee meetings and orchardist liaison meetings will be held next month.

Bruce Stanley
Whakatane

POVERTY BAY

This is the first newsletter from our region.

The local association was formed last November comprising mainly of hobbyists and those interested in bees. Since then we have held our own field day in May in conjunction with workshops held by Kerry Simpson the local apicultural adviser. The event went very well and a lot of knowledge was gained.

We have had a poor season this year due mainly to bad weather inhibiting various nectar flows at critical times. To add to the poor season, there have been outbreaks of AFB in some of the hives in the district that have suffered neglect for years.

In all probability our problems are not solved yet and spring will require further intensive disease control. This was a major factor in the formation of the local association.

Hives are generally wintering well.

Barry Foster
Gisborne

WEST COAST

The bees went into winter with ample stores this year, partly because the rata honey granulated before all of it could be extracted and because the red rata vine flowered prolifically into the winter. Favourable weather enabled the bees to put still more stores away.

Recent inspections reveal that the queens are producing well here with plenty of stores, but living from hand to mouth as regards to pollen.

There are some indications that bees in the north are not as well off, not because of the lack of stores, but pollen. One peculiarity of Westland is that the beech forest cuts off at the Teremakau river in the north and doesn't commence again until over the Jacobs river in the south.

It appears that the bees, after being busy on the rata switched onto honeydew on the beech and forgot about storing pollen, with the result that brood-rearing is very lax and the bees lackadaisical. There seems no easy cheap way of jolting them out of their torpor.

Other than this problem the prospects for the coming season seem good, providing the great leveller on the Coast, the weather, allows it to be.

Peter Lucas
Hari Hari

HAWKES BAY

Overall the crop was not good in Hawkes Bay. In some parts, the bees had to be shifted in early January to avoid starvation due to a bad drought. We had 93 days prior to December without rain, but in the higher country the hives fared much better.

Our AGM saw a change of president to Paul Ashcroft.

Mr Percy Berry stepped down from the committee which he has served on since 1944. We are proud to have him as a life member to the N.B.A.

Our congratulations to Mr and Mrs Berry on the occasion of their golden wedding.

The spring here is looking good with the pussy willow in flower, the weeping willow starting to crack; there will be less feeding if the weather stays O.K.

The branch is having a series of meetings with the orchardists as regards to spray problems, namely thinning sprays being applied while other varieties of fruit trees are in full bloom. We see this as a mounting problem.

Once again we lose our advisory officer Kerry Simpson on transfer to Oamaru. Thank you Kerry, your service will be missed. Not only do we lose Kerry, but our area has been cut by excluding Wairoa and Gisborne which is fast becoming a major kiwifruit area. We wonder where the bees for pollination are to come from.

Congratulations to Mr Marshall on his re-election as president of the N.B.A. Keep up the good work Paul.

Keith Leadley
Hastings

SOUTH WESTERN

With the spring work already starting in some of the earlier coastal areas, everyones thoughts will be on what sort of help we can expect from the weather in the next few months.

It is going to be particularly hard for those suppliers of bulk honey, who with a poor season behind them are faced with an enormous increase in the price of feed for the bees and in the rising cost of fuel. An immediate price rise would not help, as it would only benefit the packers and wholesalers who do not desperately need help.

However, with the retail outlets well stocked with honey – currently selling as low as 99 cents per 500 gram carton, and many honey-houses selling for more than $2.00 per 6 kg tub – below the recommended HMA price, the industry is not likely to get much sympathy in any appeal for help.

The recent conference was as pleasant as any I have attended over the years, the atmosphere was friendly and businesslike, and our hosts did all they could to make our stay enjoyable.

The cold in Queenstown next year won't upset this beekeeper unduly, not with Waiouru our "next door district", constantly with a temperature at 4 to 5 deg. C. Anyway with all this cold weather lately, maybe the spring will be kind to us.

Stuart Tweeddale
Taihape

CANTERBURY

The branch enjoyed an extremely informative address from Graham Kleinschmidt recently. Graham's practical and academic approach to beekeeping management and queen breeding was well received as indicated during question time.

Some members had the opportunity to attend the seminar and conference at Tauranga in August. All were impressed with the interesting topics at the MAF seminar, and the highly efficient running of conference business sessions and social events. Our thanks goes to the respective organising committees.

Canterbury has experienced a very mild winter this year;

with below average rainfall and warm sunny periods. The gorse flowered throughout the winter in some bush areas. It appears that hives on the plains and in the bush have survived the winter well and a quick spring build-up is inevitable.

Tony Scott
Christchurch

OTAGO

I am afraid that our notes this time will not give the most pleasant picture of our province. The Taieri floods which have been widely reported in papers and on TV are still fresh in our mind.

It was incredible and unless one has seen for himself it is just impossible to imagine the mess it has created and the misery caused to people living on the Taieri Plain. However, most of the people have shown a terrific spirit. It will be a long time yet before all traces are gone.

Considerable losses have been suffered by beekeepers too, not only on the plain but also further up river. A good number of hives were rescued but combs got wet and following hard frost turned them into clumps of ice. Apis melifera is not made for that kind of condition.

It has been a wet winter all round and ground conditions have to improve a good deal before we can go in and out of paddocks. Still, nature usually makes up for set-backs and it is on the cards that a good season this time will assist in recouping losses. You just have to be an optimist to survive if beekeeping is your occupation.

Conference, once again, is behind us. I was pleased to be able to go as delegate, for it meant a stay in what must be one of the loveliest cities of this country. This was followed by a holiday in Coromandel with several visits to other beekeepers. Great hospitality and good to see how the other fellow lives.

While big changes take place in our industry, which no doubt will affect all those involved, Otago beekeepers just sincerely hope that the future will show that our leaders will see things clearly and fairly, so that we can look forward to the right kind of solution. There is so much common ground that it must be possible to get over our differences.

John Heineman.
Milton

Beekeepers as poets?

Do any of you beekeepers fancy yourself as another James K. Baxter? This is your chance with a difference.

Jump River Press would like to start up a publication to do with all forms and themes of poetry related to bees and beekeeping. They are particularly interested in literature relating to bees in myth, legend and superstition. So get those pens working, you may receive a reward for your efforts.

Attempts should be mailed to:

Jump River Press Inc.
819 Single Ave.,
Wasau.
WI 54401
USA

Please enclose a self addressed, stamped envelope.

Jim Murphy dies

Many of the middle-aged and older beekeepers will be saddened to hear of the passing of C.H. Murphy (Jim) on December 27, 1979, at his residence, Temuka.

A former member of the National Beekeepers' Association South Canterbury branch, Jim established himself as a beekeeper at Temuka.

As a mark of his achievement in constructing a modern honey processing factory, a field day was held at his property February 1957 and is remembered still among beekeepers.

Jim is survived by his wife, three daughters and son.

BURRCOMB

from the editor

Mike Stuckey with a vanishing asset?

Just a pollination service?

When thanking guest speakers at the 1980 National Beekeepers Conference, vice president Mike Stuckey predicted big changes in the future structure of the beekeeping industry.

"It's timely that the conference is in Tauranga," he said, "where there is talk of a need for 20 000 hives within five years just to cope with kiwifruit pollination needs.

"Already there are problems between beekeepers and orchardists with regard to pollination services and yet there are only 5 000 hives involved. Kiwifruit are heading for Bombay, Gisborne, Kerikeri, the Hawkes Bay.

"It's possible that in 10 years time our industry will be unrecognisable. We may be pollinators rather than honey producers."

Ubiquitous Mr Dellow

During his explanation of the proposed co-op to the AGM in Tauranga in July, Mr Harry Cloake said that the idea had eminated in South Canterbury, and there had never been prior discussion with Mr Talbot.

The steering committee had employed a professional adviser, in the form of Timaru chartered accountant, Mr H.N. Dellow to prepare a report on taking over the HMA South Island operations to form a co-op. This was extended to cover the whole industry on a national scale. Mr Cloake said that the venture had the support of 103 members.

Mr Percy Berry then surprisingly asked Mr Cloake if he could name the members of the steering committee, as he was not aware of who they exactly were.

Mr Cloake replied that "there is a hard core of three, comprising Dellow, Lyttle (who is the chairman) and Cloake, and as well they take outside advice."

The proposed co-op would not be a change of name over the door, he said, but the difference between a statutory board and a co-operative trading venture. Mr Dellow would be available to be the chairman.

Panacea for panicky bees

by David Williams

JUST TO continue the discussion of drones from the last "Beekeeper", let us consider Drone Congregating Areas (hereinafter titled DCA's).

If I may just do a quick summary of a couple of paragraphs from "Insect Sex Pheromones" by Martin Jacobson, some of the points he brings out are that:

- A virgin attracts males when she reaches a height of 12 metres from the ground;
- drones are attracted first by her movement and then by her scent;
- drones swarmed in large numbers around queens tethered at heights of 30 to 80 feet within a 100 yards of an apiary;
- DCA's were observed at a distance of 150 – 1000 metres from the nearest apiary;
- queens tethered there were followed "in a highly spirited manner" within the area but "only for a very short distance from that place".

The concept (and the reality) of DCA's does raise certain problems:

If the honeybee is a recent addition to the New Zealand scene, what determines a DCA? If hives are now moved into a new area, how do drones form or select such an area? Is it some especially favoured spot climatically? Where are aerial scents strongest and does each hive have its own?

It is obvious from the literature that DCA's are not essential to mating but are perhaps a saturation technique.

John Smith, for example, once mentioned one, on the outskirts of Christchurch which not only sounded quite unsuitable as a lazing place for drones but also difficult for the ascent for virgins.

That apart, if DCA's are a reality, either we accept that one exists in the vicinity of each apiary, or that drones exist and are available at each apiary for mating purposes regardless of DCA's.

I always think of drones as fat, lazy beasts who only wander out for a bumble around at the hottest times of the sunniest days, and here we are being asked to accept DCA's, heavily stocked, and often at considerable distances from the site.

I'm sorry I cannot be more specific on any of this, and I apologise for bringing up more questions than answers but I would certainly like some expert to fill us in a little on the subject and its implications. Do virgins head for DCA's, for example? Do DCA's represent some sort of genetic pool, a device of nature for mixing 'em up a little? A territory where the males decide who's best and who gets first go?

My own queen-rearing attempts, a dozen or so at a time, have rarely ended in failure – whoops, I'll rephrase that – my virgins have rarely failed to mate successfully is what I meant to say.

And yet I've scoured the neighbourhood for any hint of a cloud of drones. I have watched drones fly off into the wild blue yonder and followed to the best of my ability – but I have never found anything of significance.

Anybody who knows anything, please share it with the rest of us!

Drone congregating areas

I HAVE mentioned water sprays before and there is no doubt that they are a useful means of settling bees. Let us run through a few examples together.

- A swarm may be settled in flight if dowsed from a hose or spray, although the tendency is for the bees to congregate in small clumps or land individually as the weight of water brings them down, and it may be necessary to allow them to dry out and settle with the queen before they may be taken and hived.
- It is not always appreciated that a settled swarm may also be prepared for taking by lightly spraying with water. This forces them to cling together more tightly and coherently, prevents potential troublemakers from flying, ensures that flying bees rejoining the group stay there, and subdues the swarm to the point where taking it can be a comparatively tame affair.

Only the outer layers are affected and they form a waterproof rain-shedding layer by hanging head up, wings down. This means that when taken the swarm is relatively unsaturated and may be treated as such. The water treatment is only used when they show signs of obstreperousness.

- A fine spray will settle a frantic hive down when smoke has failed and for the above reason. Why some hives should be hysterical all the time, why some should be as scatty as a cat on one visit and quiet as a lamb the next is a mystery, but a mist blown down through them can work wonders. Really excitable bees I requeen at the earliest opportunity.

To deviate from water and continue with hysterical bees, there is a mention in the American Bee Journal that restless bees may be calmed by including a piece of burning beeswax in the smoker. I haven't tried it myself, but some of you may care to let us know your results. In the same paragraph is a hint that the burning of dead bees may have the same effect.

- But back to water: If you are ever called upon to remove bees from an impossible situation, remember that the hose is your best friend. I have taken bees out of starling boxes, house walls, from behind fibro panels, and a dozen other places, by making sure they got a thorough wetting before I started and more if they needed it during removal.

Careful clearance for chemicals

by B.B. Watts, Superintendent Agricultural Chemicals, Ministry of Agriculture and Fisheries

You know better than I do, that without bees there would be no or a very minor, horticultural industry. Careful attention must be given to the use of sprays on horticultural crops so that damage to bees is kept to an absolute minimum.

The Agricultural Chemicals Board of which I am registrar pays careful attention to clearances for chemicals for use in areas where bees may be involved. The board needs extensive data to show that the pesticides are safe, or safe with the limitations on the label. You will be aware that some labels have the signal words "toxic to bees – do not spray plants in flower" or "spray only in the evening or morning when the bees are not flying". If there is no such warning relating to bees on the label the chemical is considered safe.

I would like to digress a little and say that the Ministry of Agriculture and Fisheries is currently considering new pesticide regulations which will replace the existing Agricultural Chemicals Regulations when the Pesticide Act comes into force. Recently a proposal has been submitted to your association that there should be a new regulation entitled "Use of pesticides on crops in flower – where any pesticide label accepted by the board contains the words 'toxic to bees' every person who uses a pesticide contrary to the warning, following these words on the label, commits an offence unless the pesticide is used in accordance with a permit from the director-general." It is proposed that this regulation will ultimately replace section 35 of the present Apiaries Act.

It is known of course, that insecticides are the most toxic group of agricultural chemicals – chemicals like azinphos-methyl which are widely used in horticulture are highly toxic to bees. Therefore orchardists must use these chemicals carefully and indeed great care is taken in MAF spray programmes to not recommend the use of these chemicals over flowering or until the hives are removed.

For example the kiwifruit spray programme clearly says the application of post blossom spray of azinphos-methyl should be made as soon as the bees are removed, with an additional warning that checks should be undertaken to ensure that bees have gone from the surrounding orchards before applying this spray.

I understand that notwithstanding the above, there have been a number of cases of bee mortalities in colonies used for pollination of kiwifruit. It is suspected that this mortality has been caused by azinphos-methyl but I believe this has not yet been confirmed.

If you suspect that azinphos-methyl used as a post blossom spray on kiwifruit may be involved in bee mortalities, this coupled with the large number of hives required per hectare plus the loss of part of the season's honey crop following the placing of bees in kiwifruit, probably makes the beekeeper wary of placing bees into kiwifruit orchards.

If you suspect no spraying over flowering, as is the present recommendation, how much greater suspicion will be if spraying is recommended over flowering, no matter if the spray used is absolutely non toxic to bees.

I want to discuss the tests that the Agricultural Chemicals Board undertook before tentatively clearing the chemical such as (dichlofluanid) over the flowering period on kiwifruit. Until last year the only chemical recommended during flowering was the fungicide captan. This was only recommended during early petal fall before the bees are removed, but it was recommended that the material should be applied in the early morning or evening.

Last year the Agricultural Chemicals Board accepted a tentative claim for Euparen for application 20 per cent blossom, post blossom and petal fall. This use is not dissimilar to other claims for Euparen and other fungicides on other crops over flowering e.g. boysenberries, strawberries, peaches.

In studying the toxicity of Euparen, the board evaluated data available to it at the time of registration and further information supplied from the result of the testing in New Zealand. In the board's opinion there is no risk to bees from a toxicity point of view as far as Euparen is concerned.

There may be some adverse effect on the flight of bees if spraying is carried out while they are flying, but this has not been established.

The MAF recommendation is that Euparen should be applied "only in the morning or evening when the bees were not working the flowers" seems to be a reasonable additional requirement.

You may well ask why spray kiwifruit over the flowering period. We are spraying to control botrytis a fungal infection which finds rotting petals to be an excellent host. The infection which enters at this period gives rise to storage rot many months later.

Trials last year indicated that best control of storage rot could be achieved by spraying over flowering, although at the moment these are at an early stage of evaluation.

In my view however, MAF will probably in the future be more widely recommending spraying over flowering perhaps three or more sprays. I understand that kiwifruit has a relatively short flowering period. For example last year the time between 20 per cent flowering to petal fall was probably no more than 14 days. So we will have a lot of sprays and sprayers working in the area in a very short space of time.

The chemicals which will be used over flowering will be fungicides which have been cleared before they are registered as being non toxic to bees. A chemical which is likely to meet this requirement and also not give rise to unacceptable residues in as much as tolerances will have been set, is the fungicide Ronilan (vinclozolin).

It is possible that there will be three applications the first at 20 per cent blossom, the second at full flower and the third at petal fall. Trials in New Zealand have showed there is no significant difference in fruit set between the fungicide treatment and controls, and that there is no difference in size between treatments. The latter is verbal advice at this stage.

Trials overseas shows that Ronalin is widely used for botrytis control with

application over flowering on grapes, strawberries, raspberries, peaches etc. There is no adverse effect on bees.

In laboratory tests the chemical has been tested for its action against bees as an inhaled poison, a contact poison, sweating effect and as an oral poison. In none of these tests did any values occur which differ from the controls.

I understand that Pat Clinch may well be doing the tests but at the time of writing this paper he was out of the country. At this stage it is the board's belief that Ronilan will probably be able to be used safely on bees, but registration will not be given until further evaluations have been made.

There may be other chemicals cleared in the future possibly captan, although this may not be able to be used because of residue problems.

In conclusion I would like to give you an assurance that the decisions to clear the use of sprays on any crop over the flowering period are not given lightly.

QUESTIONS FOLLOWING MR WATTS' ADDRESS

Q: What is the effect of Upiron on bee larvae being fed contaminated pollen?

A: Trials have so far shown no effect from Upiron on pollen. However the trial results are still being analysed and I can't give you a final answer.

Q: The maximum fine for breaking the agricultural chemicals regulations is $1000. Do you think this is enough? If an orchardist can expect profits in terms of ten's of thousands of dollars, he may well regard a $1000 fine for killing off a few hives of bees as being money well spent.

A: Your point is well taken but it is impossible to prescribe a fine in the apiary regulations which is greater than the maximum fine allowed under the Act. This fine is $1000.

Q: Where chemicals are to be used in spraying during flowering, should there not be hive trials to determine the worker rejection rates (due to smell) or other effects other than poisoning on the hives?

A: I would need to consult with Pat Clinch of Wallaceville on this. But he has done intensive laboratory trials on bees and has told me that laboratory tests are far more severe than field situations and that so far there is no evidence of worker rejection with highly odiferous chemicals such as 24-D.

At this point there was considerable discussion among delegates and with Mr Watts about whether hives should go into orchards to provide a pollination service because of the lack of confidence many beekeepers have in the suitability of orchard chemicals. Mr Watts advised the conference that there should be closer liaison and co-operation between apiarists and horticulturalists. "You won't make any progress until each party understands the others point of view and until you have confidence in the chemical registration process.

"Boysenberries and strawberries and so on require apiarists and growers to work together and they have developed a system which works, even though fungicides are applied every two or three days during the flowering season."

Q: I would like an assurance that recommendations made by the Ministry of Agriculture and Fisheries regarding chemicals won't wreck our business.

A: I could make an assurance because I have faith in the procedures that we lay down with the use of all chemicals. However the ultimate assurance lies in the hands of the person who does the spraying.

Mr Percy Berry said there was a need for an assurance from the kiwifruit industry but any losses of bees or production were costs against the production of kiwifruit and not against the production of honey.

Mr Edwards pointed out that a lot of work was being done by Don Barrow on behalf of the industry in this area. A former beekeeper with substantial kiwifruit interests, he is one of the few people who have a foot in both camps and has done much to create a dialogue between growers and apiarists in the Bay of Plenty.

The prospects for boosting queen bee production

by Grahame Walton, chief advisory officer (apiculture), presented at the Tauranga Beekeeping Seminar.

I PROPOSE to examine some of the opportunities which I believe exist for the production of queen bees, and why New Zealand has the potential to establish itself as a major supplier of bees to the world market.

During the past decade New Zealand has been an exporter of queen bees to most corners of the world; to Canada, Thailand, Britain, Iran, and countries of the Pacific Basin. However, our volume of exports has been relatively small.

Even during the heyday of our exports to Canada during the early 1970s, when over 8 000 queen bees per annum were exported, we were still operating in a relatively small way. The exporters were mostly commercial honey producers who, for a few months of the year in autumn, switched to queen bee production.

I believe that potential is there for New Zealand to develop its production of queen bees. However, to be successful it will require proper marketing.

Let us take a look at some international prospects:

Canada

Canada depends upon an annual supply of bees from outside its borders. It has also been a country that has been very particular about the quality and health of its bee stocks.

The United States has been Canada's traditional source of supply for bees. It has been a standard practice of Prairie Province beekeepers of Canada to kill off their colonies in the autumn and to start afresh in the spring with package bees obtained from the southern states of the USA – mainly California. Over 200 000 package bees are imported annually.

The Canadians have supplemented their supplies of bees from the USA with occasional shipments from other countries including New Zealand. However, in the past year Canada has tightened its importation policy and will now only import bees from just the United States and New Zealand.

The reason for this is the concern in Canada about the introduction of harmful bee diseases, and undesirable genetic characteristics. It also indicates a Canadian confidence in the health of New Zealand bees and our disease control and export certification measures.

Although package bees remain the major import requirement for Canadian beekeepers there has been a rapidly increasing demand for queen bees. Many commercial beekeepers in Western Canada are switching to the overwintering of hives. This has led, in the spring months, to a need for queen bees to make up winter losses, for requeening purposes, colony increases

and for the establishment of two-queen units.

New Zealand has an opportunity to tap this market for queen bees, but to do so, New Zealand's efforts must be properly organised.

In 1968, I saw some of the New Zealand stock under test at the Beverlodge Research Station in northern Alberta. At that stage it was very early in the testing programme but by then the researchers had established that the New Zealand bees could compete at least on a par with the traditional Californian stock, in terms of honey production; and were somewhat quieter to handle.

Subsequent tests have confirmed the quality of New Zealand bees under Canadian conditions.

In developing the export trade to Canada, I acknowledge the efforts of Mr Jasper Bray and his ad hoc group of beekeepers, who helped supply a seasonal quota of queen bees. This group of beekeepers were faced with and overcame, most of the technical difficulties associated with transporting queens over such long distances. There were problems; and these mainly related to co-ordinating the shipments, storing queen bees, and in market promotion and distribution.

The export of queen bees to Canada peaked in the 1973-74 period with over 8 000 queen bees exported per annum. It has since dropped to a trickle.

The Canadian market is one which could be re-established. It has a potential of tens of thousands of queen bees per annum. To develop this market, it will be essential to appoint an agent at the Canadian end to co-ordinate and to promote the marketing of New Zealand bees, and to arrange the import permits necessary for New Zealand bees.

United Kingdom

Like Canada, the United Kingdom has shown great concern at the prospects of introducing undesirable bee diseases – in particular, varroa disease. So much so, that in the past two years the United Kingdom has amended its bee importation requirements four times. The lastest change took place earlier this month.

Britain has prohibited the importation of queen bees from all countries without prior permit approval. In general this will only be issued for the purchase of queen bees from countries which have a so-called "high bee health status". New Zealand is recognised in this category.

Britain imports 12 000 to 15 000 queen bees annually. New Zealand exporters could perhaps have a slice of that market. To do so the New Zealand Ministry of Agriculture would need to examine and certify bees for acarine, nosema, amoeba, apimyasis, and varroasis.

Other prospects

With proper market research and development New Zealand could export bees to a number of countries in Europe, the Middle East and possibly central America.

Australia is gradually tightening its door. In 1981 it is proposed that a honeybee quarantine facility will be in operation on the outskirts of Sydney. Imported queen bees will be bred from, the progeny released, and the imported queen and escorts destroyed.

New Zealand bee health

Why does New Zealand hold a "high bee health" status in the eyes of some importing countries?

The reasons are that New Zealand:

- is free from a number of serious diseases and pests of honeybees that currently affect beekeeping in other countries;
- has effective legislation and procedures for controlling the importation of bees and bee products likely to transmit bee diseases;
- requires beekeepers to at least annually inspect all hives, report serious bee diseases immediately and to take appropriate control measures.

Control on the introduction of honeybees, honey and other bee products

The importation of honeybees, honey, other bee products, and used bee appliances is strictly controlled by the Apiaries Act 1969, and its amendments.

In administering this law MAF has prohibited the entry of all honeybees since 1956. This prohibition has been maintained because the bee itself is the major means of spreading diseases and pests. In my view New Zealand's relative disease-free state can be attributed to this policy.

In 1978 an amendment to the Apiaries Act 1969 extended this control on introductions to include honey and other bee products. European brood disease, and other bacterial diseases, can be transmitted through honey.

Foraging bees can be attracted to exposed honey, even in so called empty honey containers dumped with household rubbish. Because of those dangers the entry of honey into New Zealand is prohibited from all countries or states where European brood disease has been detected.

The entry of all bee products requires a prior permit issued by the director, Advisory Services Division, MAF.

The New Zealand market

I am not advocating the export of queen bees at the expense of the supply to the New Zealand market. I believe both can go hand in hand.

In 1974, with the assistance of apiary instructors, I carried out a survey which examined the queen introduction, rearing and breeding procedures adopted by commercial beekeepers in the North Island.

Altogether 60 out of the 80 beekeepers in the North Island operating more than 250 hives responded to this survey – a tremendous response for a five page questionnaire.

This survey showed that although virtually all beekeepers would have liked to have re-queened each colony at least once every two years, in practice the re-queening rate averaged at between three to four years per colony – probably no better than natural supercedure rates.

On a New Zealand-wide basis using this year's hive numbers we would need to produce over 130 000 queen bees per annum to satisfy the assumed commercial demand. We are nowhere near this figure.

Another aspect of the 1974 North Island survey showed a clear commercial beekeeper preference for springtime re-queening. Queen bee producers interested in export could make use of this by raising bees for the New Zealand market in the spring and developing the export market in the autumn, to meet northern hemisphere requirements.

The survey also showed that over half the commercial beekeepers who responded to the questionnaire raised their own queen bees and preferred to do so.

In my view the production of good quality queen bees in large numbers is a specialist beekeeping operation. There is a difference between raising bees and breeding bees; and breeding bees is a very skilled art.

The 1974 survey concluded that opportunities existed for the establishment of further queen breeding enterprises in New Zealand. Since 1974 apiary section staff have presented some considerable time in promoting queen bee production and breeding. I believe that as a result of these efforts of individual advisers, as well as the training courses which have been held at Flock House we are now starting to see the results. The number of queen bee breeders now advertising in "The New Zealand Beekeeper" is perhaps testimony of this.

Financial assistance is available for the development of beekeeping enterprises, including queen bee enterprises.

I believe that the prospects for queen bee production are excellent; but our success in the international arena will be dependent upon a co-ordinated marketing effort and a willingness to "think big" – not just a few hundred queen bees, but several thousands.

THE IDEA of cut comb honey for the amateur is to produce honey sealed in natural honeycomb without the small arbitrary divisions imposed upon the bees by the use of sections.

As I have said before, I produce sections each year without any problems but there is something to be said for making production as simple and as natural as possible for the bees themselves.

This, of course, means that you yourself then have a little extra bother at the end.

Cut comb honey

For cut comb honey use half depth frames and supers, with thin foundations, (the commercial people use full depth but have all the expensive equipment to handle them – keep yours at half depth).

Put one supporting wire in carefully – it has been tried without the wire but not routinely successfully. On very strong colonies put one box on at a time so the bees get busy and concentrated and check it every week. Remove the centre frames as they are completed and sealed, moving the outside ones into the centre and replacing their position with new ones.

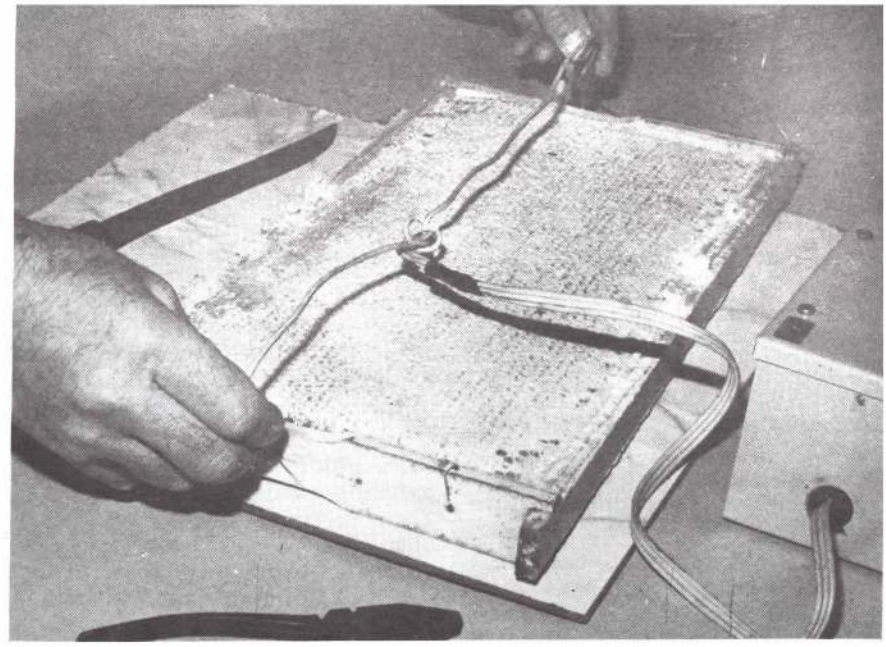
To process sealed combs, unclip wire at each end, heat as for putting in, and pull out through end with pliers. The comb can now be cut as required.

Commercially pieces are centrifuged to dry off edges but this won't apply to you – just cut and eat.

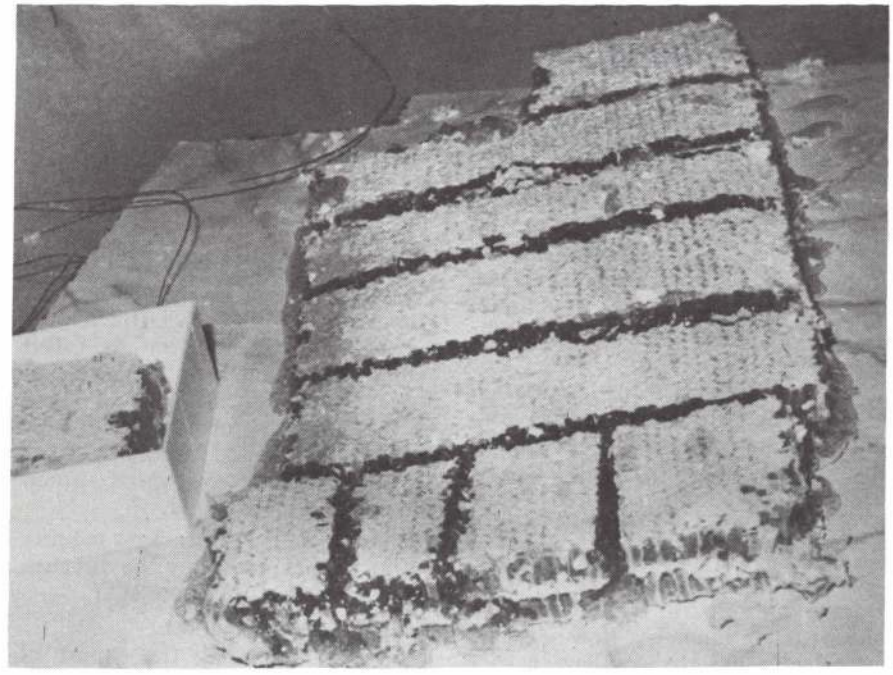
And that, of course, is something to remember – it is a slightly messy business and has to be done in hygienic surroundings and it will drip. No problem, just something that has to be organised for.

The benefits are as for sections – natural honey in the comb always tastes better than even extracted, and the frames can be stored in the supers in your honey house until needed with less fear of crystallisation than with extracted.

A novelty certainly, but a pleasant one.



Cut the wires, heat with electricity, pull out with pliers.



Cut up to size wanted – a cold sharp knife will do. Cutting on formica will reduce the mess.

Australian and New Zealand beekeepers at the Waikato Branch field day at the Narrows.

Beekeepers visit from across the Tasman

IN MARCH 1980, 43 Australian beekeepers from five States visited New Zealand to look at apiculture. The tour was organised by the New Zealand tourist company Landmark, in association with World Travel Headquarters in Sydney. I was asked to be a tour guide along with Murray Reid of the New Zealand Ministry of Agriculture and Fisheries.

The tour extended over fifteen days and started in Auckland and finished in Christchurch. The study tour combined both beekeeping and the many beautiful scenic attractions of New Zealand.

In the larger towns and cities, sightseeing was arranged in the suburban areas. Other scenic highlights visited included Rangitoto Island; Motutapu Island; Rainbow Springs; the Agrodome; Whakarewarewa Maori Reserve; Maori concert; Wairakei Geothermal Power Project; Napier Marineland; Vidal's Winery; an orchard; co-operative fruit packing shed; Sign of the Takahe; Cattledrome; Vintage Car Museum; Queenstown; and Larnach Castle at Dunedin.

Landmark did a magnificent job in allowing the tour participants to see a cross section of the tourist attractions that New Zealand has to offer, combined with excellent accommodation and meals.

Most of the tour was beekeeper-orientated and began with a visit to the New Zealand Honey Marketing Authority's bulk storage warehouse in Parnell where the tour group was welcomed by the Manager, Curtis Wicht and his staff, who explained the operation of the Authority and its important role in the marketing of New Zealand honey over a number of years.

Of particular interest was the system used to grade the honey. It seems very fair to the producer as well as the buyer. The factory was operating, and packing methods were seen first hand. Prices being paid to New Zealand producers are much higher than in Australia.

On Motutapu Island one of Waitemata Honey Company's apiaries was inspected. The tour group appreciated the trouble the Waikato Branch of the National Beekeeper's Association went to, in organising an interesting field day at Norm Finlay's honey house, Ohaupo, and at the Narrows. Of particular interest was an electric bee blower as well as many other pieces of equipment and gadgets that were on display.

Following the field day a number of local beekeepers met informally that night to discuss points of mutual interest and this was one of the pleasing things as far as the tour participants were concerned. It was appreciated that a number of New Zealand beekeepers went to this trouble, not only at Hamilton, but also at Lake Taupo, Hastings and Gore.

A visit was made to Geoff Ernest's property near Tirau where his central plant was inspected, as well as his fine museum.

Arataki's central set-up at Waiotapu was inspected. Russell Berry had arranged for his cut comb production line to be in operation, and this created a lot of interest, as did the Berry's use of geothermal steam to heat their very large factory and bulk honey tanks.

En route to Taupo a visit was made to Robin Jansen's modern honey shop. It is an example of what beekeepers can do to market their own product and display it. Robin also had his central extracting plant working at the time.

The very neat central extracting shed and honey shop of Paul Ashcroft at Havelock North was visited. A feature of this shed was the extensive use of electric power with a pyrotenic reducer and a hot water circulatory heating system. While in the Napier/Hastings area Apicultural Advisory Officer Kerry Simpson accompanied the tour and passed on information of interest. The group then flew from Napier to Christchurch.

Upon arrival in Christchurch, some of the group visited Lincoln College where Dr Barry Donovan and Dr Rod McFarlane explained the work they were doing with bumble bees and leafcutters. There was opportunities to look at honey bees at the college as well as see the work that is being done on various trees of value to bees.

Next on the schedule was a visit to one of New Zealand's many ingenious beekeepers. We called on Steven Bozi at Rangiora where we looked at cut

comb production, visited his solar heated bee house and looked over some honey dew country. While in Christchurch John Smith, the local apiary instructor accompanied the group and gave a running commentary on the history of Christchurch with all his witty stories included and well spoken Romney Marsh English!

We also visited Len Hunt's very modern central extracting shed at Ashburton. Of particular interest was the free moving sinks, clarification system and drumming up method and fibre glass coatings on some parts of the wall.

Cloake's honey house at Mossburn in the deep South was visited while honey was being extracted and Richard Beeby went to the trouble to bring down his forklift pallets and very neat hydraulic box frame. Brian Risk was also present to discuss beekeeping with the group. On the road from Queenstown to Mossburn we ran into a heavy sleet and snow storm. This was the first time some of the group had seen snow.

Clissold's new honey house at Waikaka was visited and that night a barbeque had been organised at Dolomore Park by local beekeepers. Because of the inclement weather the barbeque was held at Clissold's and special thanks go to the large number of local beekeepers that turned up for the barbeque and the way it was organised. Ivan Dickinson's plant at Milton was visited. It was being operated very efficiently by his two girl apprentices.

En route from Dunedin to Christchurch we called on Mervin and Harry Cloake at Timaru to see honey being extracted. Harry also explained their hive management practices and method of queen rearing. We also made a visit to Davidson's factory where uncapping machines are made.

The opportunity was taken to visit the honey dew country in the Mt Somers area and visit John Syme's new modern extracting shed and look over all the gadgets this inventive commercial beekeeper has made.

An added bonus was to be taken to a European wasp nest, the second biggest one that John had ever seen and this really drove home to the tour group the potential European wasps have for building large colonies in temperate climates. In 1978 European wasps were first found in Sydney and there is a campaign to eradicate them.

The group would like to express their sincere appreciation to Murray Reid for accompanying the tour group for the whole trip. Murray's expert knowledge of the beekeeping industry, as well as the history of New Zealand and other primary industries was much appreciated.

The Ministry of Agriculture and Fisheries in New Zealand is to be congratulated for allowing Murray to accompany the tour and hopefully some of the knowledge he gained from the tour and from the Australian beekeepers he will be able to pass on to the New Zealand industry. Thanks also to Apiary Advisory Officers Vince Cook, Kerry Simpson and John Smith who accompanied us while we were in their districts.

The group's thanks also go to the beekeepers of New Zealand who assisted throughout by hosting visits to their properties, helping arrange field days, preparing barbeques and giving their knowledge to those participating in the tour. The New Zealand beekeeping industry should be proud of the way they managed their operations in a business-like manner, co-operated with one another for the benefit of the whole industry and processed, packed and marketed nature's liquid gold in modern hygienic premises.

Members of the tour hope at some future stage they will be given the opportunity to act as hosts for a New Zealand beekeepers' tour of Australia.

Flock house course for beekeepers

A GROUP of 13 beekeepers gathered in the depths of winter at MAF's Flock House farm training institute. Their purpose in coming together was to join in a course on "Financial Management for Bee Farmers".

Like any other farming enterprise, beekeeping is becoming more and more capital-intensive and of course costs and taxes are rising faster than the returns obtained from the sale of honey. The days of the cottage industry are long gone, and beekeepers are becoming business managers whether they like it or not. This course examined the financial management components of a beekeeper's business.

Course members came from all parts of the country and represented all sizes of outfit from "just beginning", to established commercial producers. Perhaps it was the late arrival of all the tutors due to the plane being delayed which helped to ensure that the course members were keen to get started, and that keenness to share knowledge and experiences continued each evening in Flock House's "conference centre"

MAF tutors were Irene Parminter, Horticultural Advisory Officer (Economics), Murray Reid, Andrew Matheson and Kerry Simpson, all Apicultural Advisory Officers. A wide range of subjects was covered; keeping different types of records, employing labour, budgeting, accounting, taxation and marketing. Outside speakers were brought in to talk about sources of finance, insurances and estate planning.

An excursion was also made to Tweedales' apiaries at Taihape, where the course participants were shown around this neat and tidy outfit, they were also shown Mrs Tweedale's comprehensive cash recording system.

A lot of material was covered in a relatively short time, but course members will be able to adapt what they have learnt to their own situations, with a resulting improvement in business efficiency.

–Andrew Matheson

BEEKEEPERS TECHNICAL LIBRARY

Executive has approved of some changes in the rules of the library. The basic loan fee will be 30c a book while the initial amount forwarded to the library when borrowing books for the first time will be $3.

Out of this amount the loan fees are debited and postage is paid. With the very severe rise in postage the previous charge of $2 goes nowhere. The increase in the loan fee will enable us to save some money for purchasing new publications. Here again, books especially technical books are becoming very expensive.

Some borrowers are returning books as normal parcel mail. You can save yourself money by using that library label and pay library rates. Library rate at present is 11c per 250 g up to 2 kg. Anything heavier has to go at normal parcel rate.

John Heineman,
Hon. Librarian
Box 112, MILTON.

A FRESH START

Queen excluders, how they should be used, and when

by David Williams

I SHALL mention queen excluders again here so that you will know how they fit into your annual sequence of management. The subject comes up every year, and it must be said that they are one of the cleverest inventions yet in the beekeeping world – to allow worker bees through but not the queen.

Looking through the texts it would appear that queen excluders may be metal stamped, plastic, wood and wire, just wire, and all with or without a wood or metal rim. These are all expensive and should be looked after. As well primitive wood or hardboard separators may be used to keep the queen down.

The space or aperture width is quoted as 0.163 inches (4.14 mm) in the "Hive and the Honeybee". The same figure is also in the "ABC" with the proviso that "On account of the rounding smooth edges of the wires, they must be slightly closer, or .162 (4.11 mm) of an inch."

Rules for use

- Don't put on before needed.
- Do put on at pre-honeyflow re-arrangement.
- Do take off when you take last of honey off.

The queen excluder was invented, and exists, to ensure a precise division of the hive – queen, brood and pollen storage below – honey above. It is therefore needed during the honey-flow which only lasts six weeks. But it may conveniently be left on until supers are removed.

A queen excluder is still an optional extra and many beekeepers work without using them. They find re-arrangement of frames at the start of flow to be sufficient to keep the queen down and the honey above.

Re-arrangement consists of, (in your two-storey brood nest), putting queen and all brood to the bottom box. Empty combs, sealed honey, sealed brood (if too much to put in bottom), in the second box. This allows bees to pack the second brood box with honey forming a barrier to the queen moving up, which is always her tendency.

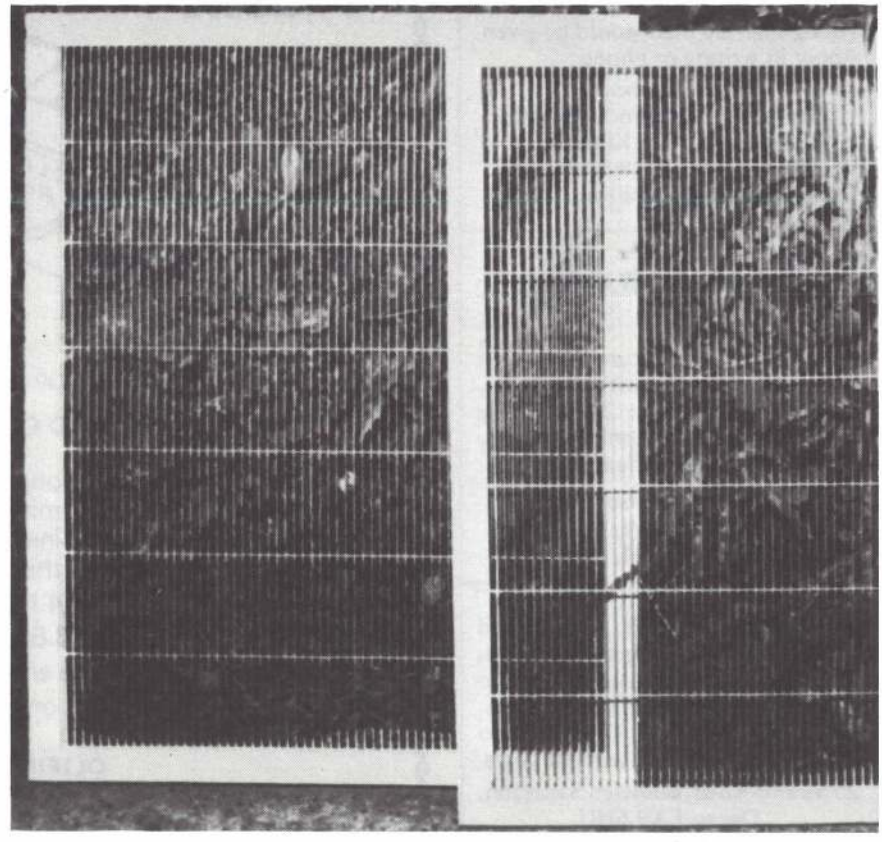
If examination and re-arrangement is not done at the start of the flow, the bees often leave the bottom box empty and what should have been winter stores in the top box are stored in the first super and taken away by the apiarist, leaving bees insufficient stores which will either never be replaced (if the beekeeper is careless or indifferent), which will mean consequent starvation of the hive, or replacement later, which is an unnecessary and often painful process.

If properly inserted at the correct time on a strong hive (many weak hives never bother moving up through) bees will work through it happily, but they do have a tendency to block it with wax, so it pays to scrape it at each visit or they may almost completely fill it.

In any case, steam clean it at the end of the season and remember drones cannot get through it. Either ensure there are none above it (which there shouldn't be if this is at first supering), or visit next day to open up the top and let any out. I have seen excluders completely clogged up with dead drones, and bees wasting all their efforts to remove them.

In summary:–

- A queen excluder is a useful piece of equipment if properly used;
- is slotted into place in management plan;
- isn't put on too early or left on too late.



Queen excluders – good if properly used. Expensive so should be looked after.

FOR SALE

50 Bee Hives for sale. 4 boxes high.

Phone 876 Drummond

WANTED TO BUY

Up to 150 4 box hives wanted. All boxes should be full depth and in very good condition. Likewise, the colonies should have a very healthy history. Please write to:

B.R. Earp, Snodgrass Rd.,
Te Puna, Tauranga R.D.2,
or phone Tauranga 25603

50 to 150 hives of bees plus sites required. Any area with potential for new beekeeping business considered.

Phone Titahi Bay 366-292
or write to:
29 View Road, Titahi Bay,
Wellington.

SITUATION VACANT

Experienced Beekeeper or a Beekeepers Assistant.

The above full-time position is now available. The company is based at Kihikihi and is producing off 1600 hives. Assistance with housing for a young married man would be given. Apply in writing or phone:

Bryan Clements
Waikato Honey Products Ltd,
8 Short Street, Kihikihi.
Phone 4709 Te Awamutu or
63-166 Hamilton.

SITUATION WANTED

Experienced American beekeeper seeks employment with New Zealand beekeeper. Age 28, available October 1980 till April 1981. Pay is very negotiable. Please write to:

Steve Bengtson,
1090 15th Ave, S.E.,
Mpls. Mn. 55414, U.S.A.

HONEYDEW HONEY. Experienced English beekeeper, aged 63 but fit, active and capable, would like to help exploit the beechwood forests. Could work in N.Z. Christmas to March and longer subsequent years.

25 Swains Road, Budleigh Salterton,
Devon EX9 6HU
Tel. 03954-3659.

SITUATION WANTED

Keen young man 27 no experience, requires job with beekeeper. Eligible for Department of Labour subsidy.

Write: Graham Clendon, 10 Norton Park Avenue, Lower Hutt.

OTHER PUBLICATIONS

BRITISH BEE JOURNAL

Published monthly. Keep up to date by taking out a subscription now from us at — 46 Queen Street, Geddington, Northants. NN14 1AZ, England.

THE SPEEDY BEE

Keep up with the latest in the United States beekeeping industry with reports of meetings and developments from The Beekeeper's Newspaper. Published monthly. For details write to The Speedy Bee, P.O. Box 998, Jesup, Georgia 31545 U.S.A. Write for free sample copy.

Do you have questions or problems about beekeeping in different areas? Learn how to solve them by reading "Gleanings in Bee Culture". A magazine made up of articles by well known professors and beekeepers, like yourself, who tell how they have succeeded in beekeeping. For details write to —

Gleanings in Bee Culture,
P.O. Box E, Medina, Ohio 44256.

SCOTTISH BEE JOURNAL

Packed with practical beekeeping. For details write to The Editor, Robert N.H. Skilling, F.R.S.A., F.S.C.T. 34 Rennie Street, Kilmarnock, Ayrshire, Scotland.

INDIAN BEE JOURNAL

Official Organ of the All India Beekeepers' Association, 817 Sadashiv Peth, Poona 411 030 (India). The only Bee Journal of India published in English, issued quarterly. Furnishes information on Indian honeybees and articles of interest to Beekeeper and Bee Scientists. Annual Subscription post paid, for foreign countries.

AUSTRALASIAN BEEKEEPER

Senior Beekeeping Journal of the Southern Hemisphere. Complete coverage of all beekeeping topics in one of the world's largest beekeeping countries.

Published monthly by Pender Bros. Pty, Ltd., P.O. Box 20 Maitland, 3N. N.S.W. 2320, Australia. Subscription by Bank Draft.

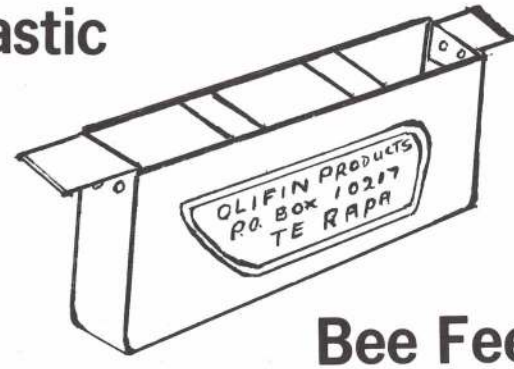
AMERICAN BEE JOURNAL

Subscribe now to the oldest bee magazine printed in the English Language. Amateur, professional and scientific news makes ABJ an attractive buy for any beekeeper. World-wide crop and market page an outstanding feature. For details write to American Bee Journal, Hamilton 111. 62341 USA.

BEE CRAFT

Official (monthly) magazine of the British Beekeepers Association. Contains interesting and informative articles. Write to The Secretary, 15 West Way, Copthorne Bank, Crawley, Sussex, RH10 3DS.

Plastic



Bee Feeders

FOR SYRUP OR DRY FEEDING.

NEW IMPROVED ONE PIECE MOULDING.

Made of light, strong impact resistant plastic.
Non rust aluminium lugs and rivots.
Full depth hangs inside the hive replacing one frame in the brood chamber.
Hold 4 litres of syrup.
ONLY 3.80 each Ex store.
Postage and freight extra.
Discount on orders over 100.

OLIFIN PRODUCTS.
P.O. Box 10217,
TE RAPA.