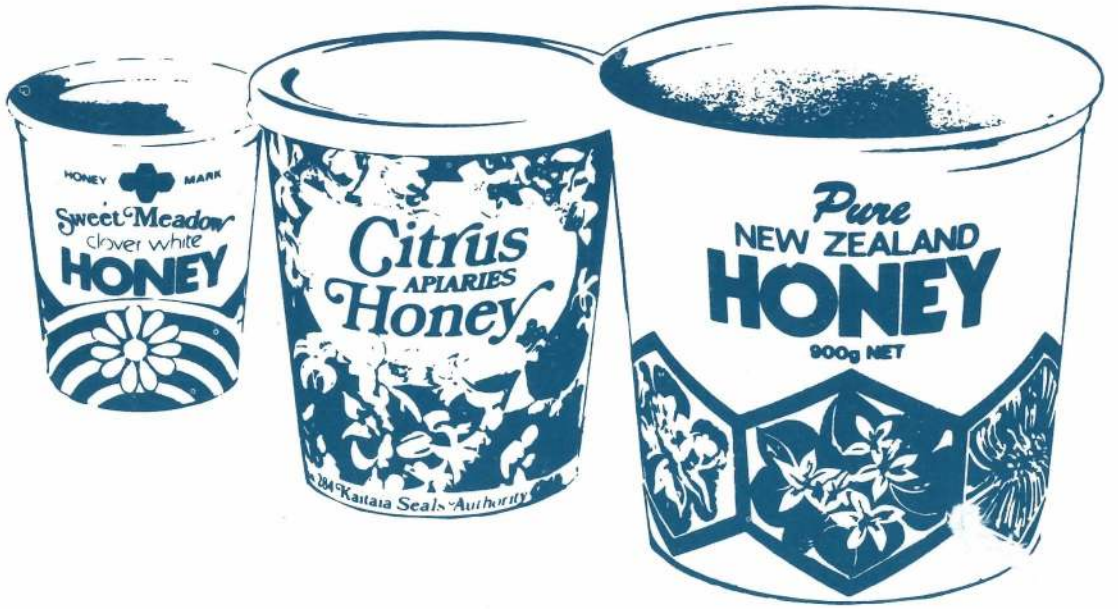
THE NEW ZEALAND beekeeper

SEPTEMBER, 1978

Bee more successful with printed Lily cartons



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THE NEW ZEALAND BEEKEEPER

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Full steam sideways

THE 1978 INDUSTRY conference made a lot of noise, but it didn't really get anywhere.

Most of the remits were from the same barrel as the two previous years. And the 1978 treatments were similar.

However, there were some changes.

President Percy Berry raised eyebrows with a provocative address which subsequently wasn't adopted by the conference. It wasn't even formally discussed.

Two delegates from South Canterbury set a precedent for personal attacks and vilification which everyone could have done without.

Russell Poole, at his swan-song conference (he has retired from active beekeeping and from the Honey Marketing Authority) let past differences with the NBA pass forgotten. He made a number of highly-constructive contributions to debate.

For the delegates, the contributions might never have been made. By and large they went about their voting pretty much as they had been instructed by their branches. Their unwillingness to be convinced lending a stage-like image to the proceedings.

It all begged the question as to whether the main success of the conference belonged to the organisational abilities of the Hawkes Bay branch; that perhaps it is time for delegates to realise that they too have a constructive part to play.

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Full page $120 (4 insertions $100), Half page $65 (4 insertions $55), Quarter page $35 (4 insertions $30), 1/8 page $20. Special locations $20 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.

Full page $90, Half page $50, Quarter page $25, 1/8 page $15, $2.50 a 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 NZ 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 and others who may not wish to join the association, will pay an annual subscription of $7.50 which includes the cost of a subscription of the NZ Beekeeper.

Export incentives for packed honey

News that the Department of Trade and Industry has included packed honey in its list of goods eligible for export incentives has been greeted enthusiastically by many beekeepers. The notification of the decision reached the National Beekeepers' Association on July 20, but applies to exports of packed retail lines of extracted honey weighing 3 kg or less, as from April 1, 1978.

Export incentives cover a wide range of tax concessions and grants. Beekeepers intending to make use of them would be advised to write to the Export Incentives Committee, Department of Trade and Industry, Private Bag, Wellington, for a copy of their booklet outlining the details of the export incentives scheme.

No inspection fees

The government announced in the 1978 Budget that inspection fees, including those related to honey, are to be cancelled from October 1, 1978.

The Honey Export Regulations 1950 will be amended to revoke the present charge of 0.1 cent per lb for all honey withdrawn from the grading store after it has been graded and approved for export. In addition the regulation covering the charge equivalent to the travelling expenses of the honey grader together with $2 a day for the time spent by the grader in connection with grading honey for export outside the periods specified will be revoked, as will that specifying a regrading charge.

The proposed changes to the regulations to provide for a charge to be made on all honey graded for export will not now proceed.

Roadside trees for bees

As a result of a 1978 conference remit, the NBA executive has approached the Commission for the Environment to investigate the feasibility of allowing farmers to plant roadsides with suitable flowering shrubs and small trees. Local counties, say the NBA, can be encouraged through the commission to allow this departure from current by-laws. Permits would, however, be needed to ensure the area was suitable for planting.

According to the NBA, the benefits which would arise would be:

- Protection of pastures from drying winds
- Saving in fencing costs for shelter belts
- Enhancing the aesthetic value of our roadlines
- Provision of pollen and nectar sources for bees
- Provision of nesting sites for many birds .

BEEKEEPERS TECHNICAL LIBRARY

P.O. Box 423, Timaru
Chris Dawson, Hon. Librarian

Thanks to the following for books donated to the Library:

- Guide to Bees and Honey. By Ted Hooper, N.D.B. 260 pages, 1976.

A second copy of the above book has been donated by Theras J.L. Broadley of Paeroa.

- A Manual for N.Z. Beekeepers by William Charles Cotton, 116 pages, 1848 - reprinted 1976.

Donated by Chris and Ian Dopson of Featherston and Graham Rogers of Waiheke Island.

- The Beekeepers Manual by Henry Taylor, 7th Edition, 400 pages, 1880.

Donated by B.F. Hamsen of Geraldine.

- Nectar and Pollen Sources of N.Z. by R.S. Walsh, 60 pages, 1967 (reprinted 1978).

Donated by National Beekeepers Association of N.Z. (Inc.).

SPECIAL NOTICE

Since the Library was first established in 1963, loan fees have not been increased and have included the cost of postage of books to borrowers. Owing to increased cost of postages, the National Beekeepers Association Executive, on the recommendation of the Library Committee, has decided that while most of the loan fees will remain the same, the cost of postage will be paid by the borrower. Loan fees are increased on the high cost books and long loan books.

Borrowers are now required to send $2 with their first request for books. Loan fees and postages will be deducted from this. Borrowers can calculate their amount in credit and send more funds when necessary. When users of the Library finish borrowing, any amount to their credit will be refunded on request. If no refund is requested, the amount to their credit will be applied to the general funds of the Library.

Library books are available to members of the National Beekeepers Association. Obtain catalogue and rules from the Librarian, Box 423, Timaru — send stamped addressed envelope.

Clinch complimented

Mr Pat Clinch, leader of the Wallaceville apiculture section was complimented on the quality of the paper he delivered to the Apimondia Congress in Adelaide. Mr Steve Lyttle, a delegate, said Mr Clinch's paper was one of the few which attracted the attention of the whole conference. Mr Lyttle also said that the quality of the colour slides that Mr Clinch used to illustrate his talk were superb.

Pollination services

Over 6 000 hives were used in paid pollination services to kiwifruit, pip-fruit and stone-fruit producers during the 1977/78 season, returning a rental income of $75 000. The beekeeping industry provides a far greater, and free, pollination service to New Zealand agriculture generally with its widespread distribution of hives.

NBA EXECUTIVE COMMITTEE ELECTION RESULTS, 1978

North Island:	P. Marshall. . . .2987 votes	(elected)
	T. Gavin . . . . .1630 votes	
South Island:	W. Clissold. . . .3369 votes	(elected)
	M. Cloake . . . .2585 votes	(elected)
	K. Herron . . . .1942 votes	
	G. Jeffery . . . .1282 votes	

Votes cast by 395 members plus 2 informal.

Record honeycrop

The honeycrop for the 1977/78 season has been a record. The 8 279 tonnes produced exceeds the previous record in the 1974/75 season by 868 tonnes and is well above the average annual production of 6 100 tonnes of the past six years. The Waikato, Bay of Plenty, Hawkes Bay, Taranaki, Manawatu and South Island districts have reported excellent crops, with average to above average yields in the remaining districts.

For the year ending August 31, 1977, 1 777 tonnes of bulk extracted honey was submitted for grading. Of this 37 tonnes did not meet the export grade requirements.

MAF staff graded 182 tonnes of comb honey for export, an increase of 69 tonnes over the previous season. Apiary section staff have held two well-attended seminars on comb honey production and if market prices remain high it could be anticipated that the export of comb honey, and in particular cut-comb honey, will show further increases in future years.

Blood out of a stone?

Recently received by the Honey Marketing Authority:

Dear Sir,

There is an alternative, and the New Zealand Labour Party has the policy, which given the opportunity to govern, will set about restoring and expanding business confidence.

I am sure you are fully aware just how costly an undertaking a General Election is for any political party, and the scale of the operation makes it necessary for the party to seek financial assistance.

The Labour Party has never been a wealthy party, its finances coming mainly from electorate branches and some Trade Unions, and in an election year additional funds come from responsible people and organisations within the community.

Accordingly, your assistance and support is earnestly sought, and your full consideration of this request for additional funds will be greatly appreciated.

I look forward to a favourable reply.

Yours faithfully,
Joe Walding,
Senior Vice-President,
N.Z. Labour Party.

Queen bee exports

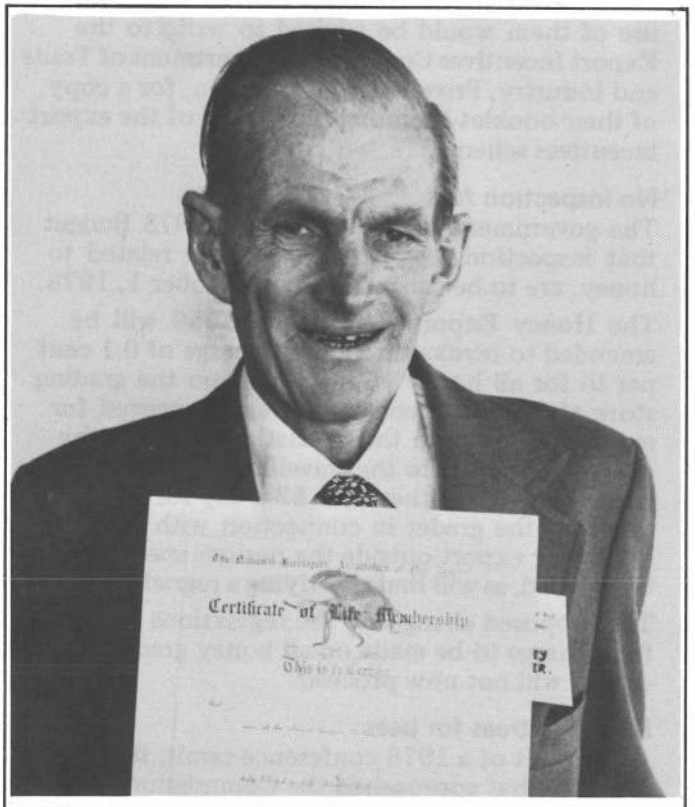
Approximately 9 000 queen bees were exported from New Zealand this past year to Iran, Canada, Europe, Australia and the Pacific Islands.

Thanks, MAF. Good Seminar

The Ministry of Agriculture and Fisheries has been thanked by the executive of the NBA for the seminar held in association with the 1978 industry conference in Hastings. Executive members praised the excellence of the seminar and decided to recommend to the ministry that a similar seminar be run at the 1979 conference in Oamaru.

Next Conference

The 1979 conference of the NBA is to be held in Oamaru, to mark the 50th jubilee of the establishment of the North Otago branch of the association. The executive has agreed that the conference should be held on Wednesday, Thursday and Friday, July 25 to July 27, with a MAF seminar proposed to be held on Tuesday July 24.



The proudest man at conference

LONGTIME INDUSTRY stalwart and activist, Dudley Lorimer, was honoured by the presentation of life membership at the 1978 industry conference.

He was the only member to be so honoured and the executive's recommendation to the conference was carried with acclamation.

He is pictured above with his life membership certificate which has since been suitably inscribed.

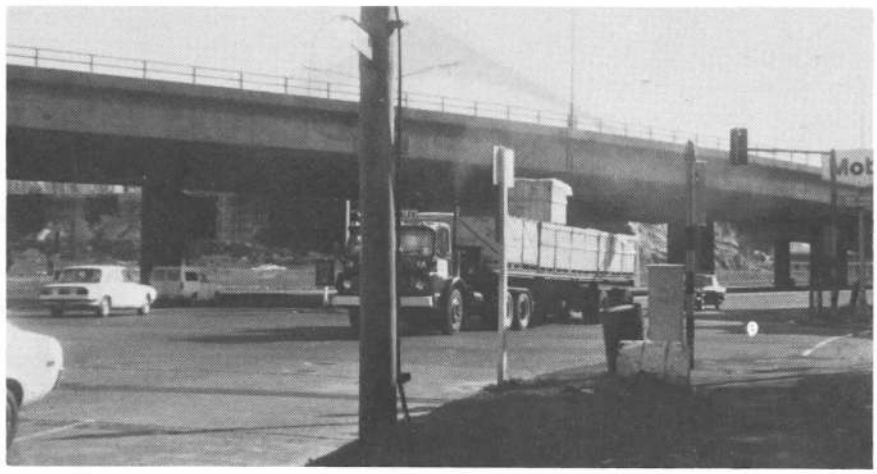
Metrics are here to stay

M-DAY for H-HONEY has arrived. On April 1, 1978, the Metrication (Retail Trading) Regulations came into effect.

As from that date, it became illegal to sell goods in imperial units, unless they had been packed before April 1, 1978, or unless the goods were pre-packed, in which case they could be pre-packed in imperial units until October 1, 1978.

This means that beekeepers or retailers who sell honey to the public must use authorised metric-sized containers from October 1,

turn overleaf



The biggest shipment

A large transporter makes heavy work of the largest single comb honey shipment ever to leave New Zealand. Destined for the Middle East, the shipment consisted of 39 C-vans each containing 200-dozen 340-gram packs of comb honey.

Photographed by Bruce Belin of the Waitemata Honey Company, the shipment was organised from a sale made by Percy Berry on behalf of the Comb Honey Producers' Association. The association is an informal co-operative which has had many export sucesses over a number of years thanks to the willingness of members to pool export and price information for the benefit of all members.

One enthusiastic lady member of the Rotorua Amateur Beekeeping Club proved increasingly allergic to bee venom. Wisely, she decided to do something about it. This is her story. She calls it:—

Natural immunity is easier

UNTIL A few years ago, I had only been stung twice. On both occasions the bee became entangled in my hair and I tried to free it. The sensible thing to do, of course, is to squash it before it stings.

The first sting was at the age of six, when I cried for a while and was none the worse for the experience.

Thirty-odd years later, the next sting caused unpleasant sensations at the back of my head for about three days, but these disappeared just as I was thinking of asking for medical advice.

The opportunity to take up beekeeping came two years later and I was unperturbed when all the books said that frequent stings were inevitable. Most beekeepers build up an immunity and suffer no more than the initial 'prick'.

Having always been monotonously normal in health matters I looked forward to the time when I would be desensitised. The bees duly arrived and, thanks to expert tuition, we managed several inspections without giving offence.

It wasn't until a year later that sting no. 3 penetrated two layers of thick socks. The immediate sensation was unpleasant, with a prickling hotness all over my body and the curious feeling that my scalp had turned into cardboard.

My foot didn't start to swell until evening, but once it started it kept on for three days. Walking (and work) were impossible.

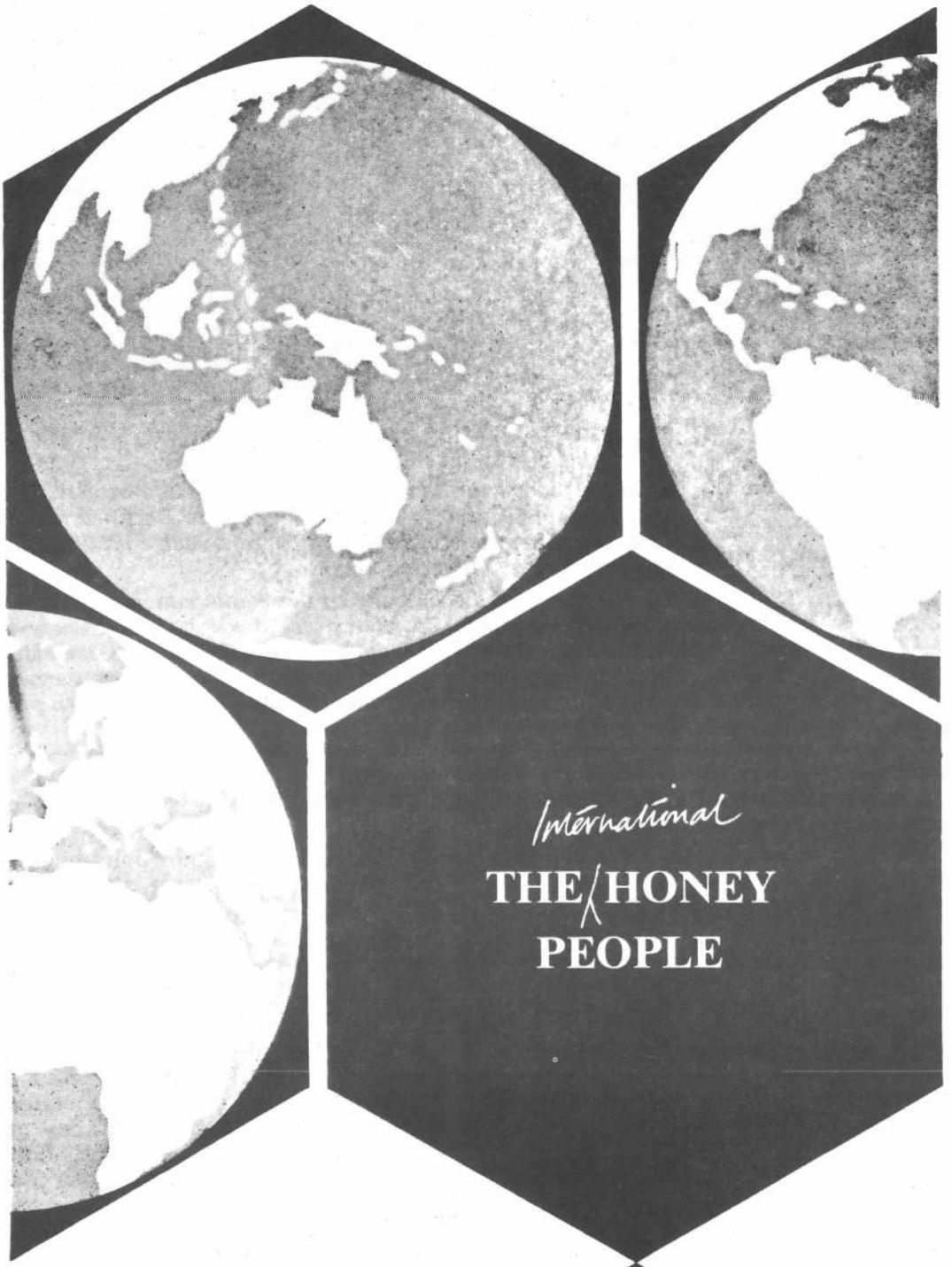
When the swelling reached my knee I hobbled into the doctor's surgery on two sticks and was given an injection of antihistamine. My foot took about a week to get back to the normal shape.

The doctor pointed out that, for a beekeeper, there was likely to be a next time when *something more serious* might happen, and he advised a course of injections to provide the immunity I clearly didn't have.

The vaccine came in three small bottles. The total amount was equivalent to one sting, suitably diluted. Each week the dose rate increased until bottle no 1. was emptied. Then we started small doses from bottle no. 2, and so on for 15 weeks. After that I got a small dose from bottle no. 3 once every three weeks.

One year from the first injection I accused the doctor of topping up the bottle while I wasn't looking and we agreed to call it quits, particularly as by this time the cost per injection had increased 20 per cent!

Was it all worth it? About half way through the doctor suggested that it might be interesting to see what would happen if I got stung again, so I became



chief assistant to my husband who had taken over all the beekeeping in the meantime.

The bees, of course, turned very friendly and refused to oblige, and I wasn't game for deliberate provocation.

Then one day when I was merely *watching* from a respectable distance, sting no. 4 was delivered into my neck. I must point out that this was entirely the wrong moment for experiments. I was due to present a paper at a professional symposium the very next day and had visions of a blocked windpipe or, at the very least, a grossly swollen face.

But all that happened was a small, localised irritation lasting a couple of days.

It seems that medical science has something after all! My doctor won't commit himself about the duration of the immunity, saying only that he's had 'no complaints under two years'.

I suppose I should get with the bees and insist on a free injection every three weeks, but somehow it isn't the same unless it comes out of a sterile bottle and costs $3!

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from previous page

1978, unless the honey was packed before that date.

The authorised metric sizes for honey containers are as follows: 250 g, 500 g, 900 g, 2 kg or multiples of 1 kg which are greater than 2 kg.

In a letter to the National Beekeepers' Association, the chief inspector of weights and measures said:

"All goods which are prepacked after October 1, 1978, including standardised and non-standardised goods, must be in metric units. But packers have the option of supplementing metric with imperial units until at least June 30, 1979, provided the size of the imperial lettering is not more than half the metric and is not given greater prominence. This option also applies to advertising, price ticketing and price listing of any goods sold by retail by weight or measure."

U.S. Blue Honey – It's bee-zarre –

by Robin Clark, Staff Writer,
"Daily Tar Heel," Chapel Hill, North Carolina, USA.

DAVID RATLEY'S bees didn't make any blue honey last summer. Maybe they weren't in the mood.

But some years, Ratley and his bees make tons of blue honey — more than 11 tons his best year — and even scientists who study bees at N.C. State don't know how they do it.

Blue honey is unique to eastern North Carolina, and even there it's rare. Of an estimated 200 000 bee colonies in the state, only a handful ever yield blue honey.

But as bee-zarre as it may look to people seeing it for the first time, Ratley says his family has seen blue honey in their hives down in Bladen and Cumberland counties for more than 45 years.

Ratley's bees made so much of the stuff in 1969 and 1970 that he shipped several thousand pounds each year to a buyer in Germany.

"Of course, it got some publicity then," says Ratley, who at 60 is the world's only exporter of blue honey. "I got letters from people all over the country wanting to buy a jar of blue honey.

"Then somewhere out in the midwest, somebody changed the blue to green in the news accounts, and that started something else — people writing wanting to buy green honey."

Ratley says the requests have slacked off now, and he's glad. He says blue honey is not dependable enough to put on the market. One year he gets tons, the next year practically none at all.

"There was one year I made solid supers of it, 30 pounds to the hive in 800 or 900 hives. Then other years there's just a little dribble around the edge of the other honey."

Ratley says some people who have tried his blue honey say it tastes no different from normal amber honey. Others liken its taste to pancake syrup, with a hint of corn.

"If you were to look at it and taste it, you'd swear there was some grape jelly in it," Ratley says. "You'd be influenced like that by the colour.

"But if you were to close your eyes and taste it, you'd think it was just good honey."

While people may disagree on the taste, there's no confusing the colour. It's dark blue.

What makes it that way?

"You get five beekeepers together discussing that and you'll get three or four different answers," Ratley says with a laugh.

Some people think the bees change the colour with special enzymes in the hive. Others think the nectar turns blue in the plants under certain soil conditions and that the bees have nothing to do with it.

"For a long time I accepted my dad's theory on blue honey," Ratley says. "He said it came from the ripe berries in the woods.

"But I've had bees where there's hundreds of acres of cultivated blueberries that don't make a drop of blue honey."

Ratley believes now that the blue nectar is made by the sourwood tree for a few weeks during the summer.

Blue honey isn't sold at the supermarket yet, but scientists who study bees at N.C. State say locating its source could be a boon to the state honey industry.

North Carolina ranked only 20th among the states in honey production in 1976, and the state honey and bees wax industry grossed less than $3 million. Many beekeepers on the coastal plain lost more than 90 per cent of their honey crops to a late frost that killed the blooms bees depend on for nectar.

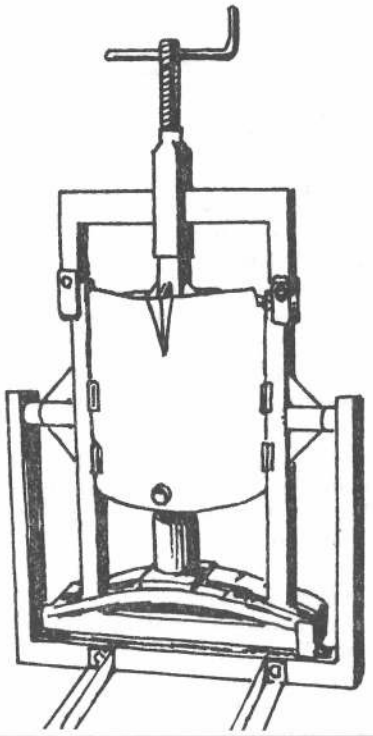
"If we can find out where blue honey comes from, we can actually charge more for it than other honeys," says John Ambrose, who operates the NCSU apiculture lab on Varsity Drive in Raleigh. "That's our goal.

"The trouble with marketing it now is that the average shopper won't buy blue honey unless he knows what makes it blue."

A special research project this summer at State will try to isolate some of Ratley's blue honey hives and monitor the bees as they come and go.

"When blue honey starts showing up, we'll catch bees as they're coming back into the hive and we'll dissect them right there and empty their stomach contents," Ambrose says. "If we find the blue substance there, it would prove that it's blue when they bring it in, and they're not changing it in the hive."

After that, it's just a matter of tracking the bees back to their source. Ambrose says that sounds easy unless you've tried it.



Another waxpress on the market

INVENTIONS AND beekeepers seem to go together.

The latest development is a new wax press, the second we have reported this year. The first was powered by mains water and described in the March issue of the NZ Beekeeper. The latest is operated with a hydraulic jack and is the brain-child of Bryan Mitchell, a Waikato beekeeper.

Interviewed at the 1978 conference where his press was on display, Mr Mitchell said he was moved to invent his own press because he was not satisfied with either the cost or the efficiency of other presses on the market.

"Three years accumulation of slumgum, old wax and reject combs finally became unbearable. The previous year, I had used another beekeeper's wax rendering plant and made some reduction to the volume of wax to be rendered by processing the culled combs.

"But that was only a temporary respite as this last season I had 130 more boxes to cull combs, plus slumgum remains. In short, I needed plant to cope."

Bryan developed his own press by adapting features from presses with which he was familiar and adding these to features of his own design. A local engineering firm was consulted and within a month of the first discussions, the first prototype was a reality.

Queen bees exported

A WHAKATANE apiarist with 300 hives produces honey only as a sideline. His main business is exporting queen bees to Iran.

Mr B. Stanley began rearing queen bees about four years ago and his first exports were to established markets in Canada.

New Zealand beekeepers want new queens in spring and autumn, while Canadians seek replacement queens in March and April.

That left February and March, months when conditions were perfect for rearing good quality queens.

So Mr Stanley set out to find a market for summer-bred queens.

He wrote to New Zealand embassies in the Middle East and was put in touch with an Iranian beekeeping agency.

The first order from Teheran early this year took all the queens Mr Stanley could produce during the summer months, about 640 of them.

Sensing the potential of the market, he sent only the best queen bees he could produce.

Problems with freight and fumigation during that first shipment caused substantial losses. Up to 40 per cent of the first queens died in transit, which cut all profit for Mr Stanley.

However, the Iranian beekeeper was so impressed with the quality of the survivors that he asked Mr Stanley to fill an order for up to 20 000 queen bees next summer.

This order was way beyond Mr Stanley's resources, so he invited the managing director of the Iranian agency, Mr Miri Levasanni, to come to New Zealand and investigate other sources of supply.

Beekeeping on high country run

THE PRACTICALITIES of integrating beekeeping and honey production with normal farming were outlined and explained by Mr P.A. Innes, of Black Forest Station in the Mackenzie Country, at a recent seminar at Cave.

He said that it was decided to go into beekeeping because the station was in a dry area and comparatively remote from the main honey producing areas.

He said that the country had to be destocked for two years to allow for flowering. Six hives were bought for a start and later this was built up to 300 hives some of which were also sited on the neighbouring Haldon Station.

After initial establishment difficulties the fledging industry was now a going concern and generally returns had been good.

Mr Innes suggested that farmers should encourage beekeepers to put more hives on their properties.

The apiarists could be asked to move hives to oversown areas where there was a lot of clover. If there were not bees in those areas the clover would not set seed and would die out.

He also urged an investigation by farmers and run-holders into the establishment of more nectar bearing tree varieties. Since gorse

The press uses an hydraulic jack, acme screw and heavy duty springs, combined with steam and hot water to remove all the wax that can be practicably recovered.

Depending on the volume of steam and hot water used, each pressing takes only about 15 minutes and the slumgum is virtually devoid of any trace of wax.

The press has been designed to facilitate easy conversion to compressed air or even water pressure operation. For beekeepers who don't have compressed air, but envisage a compressor will eventually be obtained to power staple guns etc., here is an efficient press that can be upgraded to keep pace with future development.

The press is advertised elsewhere in this issue.

Mr Levasanni met three other beekeepers who produced queen bees and when he went back to Iran he left behind firm orders for 8000 summer-bred bees.

Mr Stanley and the other three companies will fill the orders between them.

A change from plastic to wooden packing, improved ventilation and a change in the composition of the "candy" which keeps the queens alive during their journey have all but solved the problem of losses during transit.

And next year the queen-exporters will be expanding their production in an attempt to meet the demand for this unusual export product.

NZ Herald

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and broom had been cleared beekeepers were having to cope with a dwindling nectar supply.

As the gorse and broom was cleared farmers should plant trees which would produce marketable timber or would flower and produce nectar in the August-December period before clover flowered.

Mr Innes said that flowering trees could produce timber as well as honey and assist in increased stock and pasture protection by providing shelter.

Timaru Herald, 14/7/78

HMA chiefs reprimanded

by Trevor Walton

AT A RECENT meeting of the Honey Marketing Authority, the general manager of the authority, Mr Curtis Wicht and the deputy chairman, Mr Percy Berry, were reprimanded for allowing the sale of Arataki honey to Iraq for less than the Base Price.

This was revealed by former HMA chairman, Mr Russell Poole, during a discussion on private exports at the 1978 National Beekeepers Conference in Hastings.

Following explanations by Wicht and Berry, the conference seemed to concur with the frequently-expressed view that there was room for misinterpretation of the HMA's minute detailing the procedure for private lines of packed honey.

When selling a large shipment of honey to Iraq earlier this year Mr Berry, as chief executive of Arataki Honey, approached the general manager of the authority, Mr Wicht, to get approval for discounting the previously agreed minimum export sale price by 5 per cent. According to Mr Berry, Mr Wicht gave a verbal agreement (by telephone) in this regard, though he did not confirm it in writing by Telex immediately afterward, as Mr Berry had expected.

Mr Berry then went ahead with the sale.

Mr Wicht explained to the conference that he reluctantly agreed to the 5 per cent discount because he understood that Mr Berry had already quoted the discounted price to an Iraqi Government agency. He nevertheless told Mr Berry that the matter would have to be discussed by the authority.

Because he had no secretarial assistance available at the time, Mr Wicht delayed his confirmation of this message to the following day, when he sent an appropriate Telex message to Arataki.

Mr Hayman, the government representative on the authority, said he understood the minuted rules relating to private exports of packed honey were so formed as to prevent the sale of honey for less than the Base Price. In his view the rules were infringed by the Arataki sale and for this reason he voted in favour of the censure motion.

"I did this with the knowledge," he said, "that I could be criticised for making a decision one way or another. But I preferred this to being criticised for sitting on the fence."

Mr Hayman said that the rules could be changed to allow for discounting if this was necessary. But if there were to be private exports, they had to be according to strict rules to ensure that exporters did not undercut each other and that returns were the best for the country.

The need for these controls was emphasised by Mr Poole. "Anyone can discount," he said. "Just look at your newspaper. . . In many cases, discounting is just the sign of a weak seller."

The censure motion is one of a number of recent moves involving splits on the HMA board which have created acrimony and ill-will among producer members. These have gone so far as to include threats of legal action.

With two current members in favour of liberalised private exporting and two in favour of restricted private exporting, the weight of decision on the board is being carried by the government appointee, Mr Hayman.

In order to break the deadlock and power of the government representative it will be necessary for producers voting in this year's HMA elections to endorse candidates from one or other of the two camps. Unfortunately, with conference votes for and against private exports evenly divided, the chance of another evenly-divided board resulting appear likely.

VIEWPOINT

How about some co-operative packhouses?

by P.H. Andrews, New Plymouth

AS A comparative newcomer to New Zealand beekeeping I have become increasingly aware of the high cost of equipment.

Even if one could afford hives and ancillary field equipment, the high cost of extracting and processing equipment must be beyond the reach of many people. This situation will probably become worse if the new health regulations are implemented in their entirety.

A possible way to lessen the cost problem while still improving the efficiency of the honey industry, would be for beekeepers to start extraction and processing co-operatives.

These co-ops could be designed to accept honey in the form of a slurry of broken comb, cappings and honey. High speed centrifuges could be used to separate the honey, and pumps, high pressure filters and settling tanks used for final clarification before packing. The resulting wax would be processed in a parallel operation and cast into refined cakes.

With such a plant at their disposal, beekeepers would be relieved of the time-consuming and messy work at present associated with extracting. They would simply be required to cut the capped combs from their frames, allowing the honey/wax mixture to fall through a suitable funnel into a waiting storage vessel. When sufficient were filled they could be trucked-off to the plant in much the same way as milk is handled.

Once processed, the honey and wax could be graded on the spot and the originating beekeeper advised of the current market prices obtainable.

He could then, at his option, either accept the quoted prices and allow the co-operative to dispose of his product or have it returned to him for private sale.

An additional advantage would be that the beekeeper would have no wet combs to contend with or wax moth problems during winter storage. During the winter months, the empty frames could be boiled or scraped clean of adhering wax and propolis and generally repaired before new foundation is fitted before the next season's honey flow. Wiring of the frames could also be dispensed with under this system.

For the benefit of those who are groaning about the high cost of foundation, the co-operatives could also have their own wax mills. These would produce foundation using wax extracted from the honey.

Bearing in mind that the slurry delivered to the plant would contain old foundation as well as cell walls and cappings, it is probable that, even allowing for wastage, beekeepers would receive at least as many sheets of foundation as the number of combs harvested.

It may be argued that bees consume some 10 kg of honey to

Wicht warns against discounting

HMA GENERAL manager Curtis Wicht has warned beekeepers selling packed honey on the local market not to listen to advice from retailers that the HMA was discounting on the local market.

"We're not," he said.

Mr Wicht told the 1978 NBA conference he had seen a Foodstuffs newletter which advised its outlets that there was a lot of honey on the market this year and that any retailer would be foolish to buy it at the official price.

"We've had any number of enquiries from retailers saying they can get cheaper honey elsewhere," he said.

With his 30 years experience in the grocery trade, Mr Wicht said he suspected that some chains were discounting HMA honey off their own bat. "We're not discounting to them, so I can only assume they're trying to trigger off a chain reaction of discounting by private packers."

Mr Wicht said the authority tried to withdraw from the local market in years when the crop was good, but not so much as to lose shelf space. In years when the crop was poor and supplies from private packers were down, the HMA tried to boost its sales locally.

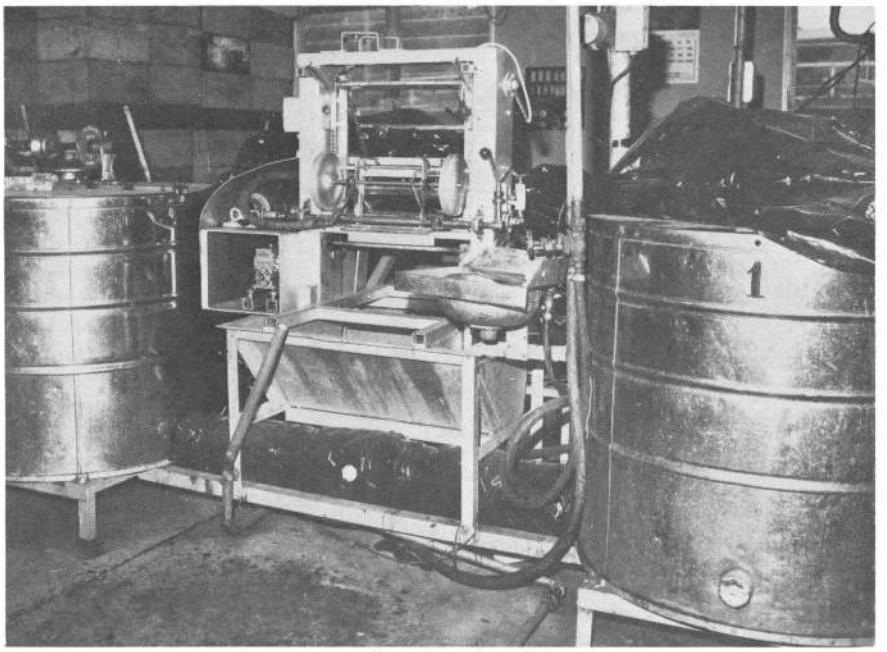
"Rather than trying to embarrass any local packers," said Mr Wicht, "we are trying to complement their efforts."

produce 1 kg of wax and that the honey crop will therefore decrease as a result of the bees having to make new comb each season. Although this may be true, the extra weight of wax produced by the bees drawing out new combs as opposed to using old extracted combs amounts to the weight of the cell walls only. This is a very small weight indeed, even when multiplied by 10 to arrive at the equivalent weight of honey.

It should also be borne in mind that "house" bees, not "field" bees, produce the wax. Therefore the nectar input to the hive will not be reduced by comb building operations.

It is also known that house bees have to produce wax as part of their life cycle. If this wax is not used to build comb and cell cappings, it will still be produced and subsequently discarded by the bees.

A final consideration in favour of a co-operative processing plant would be the possibility of eliminating Bacillus larvae and yeast spores during the processing stage. This could be by means of high intensity radiation treatment using an isotope source.



"Beekeepers would be relieved of the time consuming and messy work at present associated with extracting . . . . . "

Such treatment, which is quite beyond the capacity of the small operator, would render all marketed honey and wax sterile, without any harmful effect on quality. This would prevent fermentation of honey during storage and also eliminate the possible spread of BL from bees consuming spilled honey from broken containers or discarded empty retail packs.

It is possible under the present system used in this country for BL spores from an infected apiary to be spread to all retail honey outlets.

Regrading grading regs

MAF DIRECTOR general Malcolm Cameron has agreed to an apiculture section proposal that the Honey Grading Regulations should go back to the drawing board.

The reason is that previous changes in the regulations had been done piecemeal and did not go back to fundamental grading principles.

Grahame Walton, senior advisory officer (apiculture), told the 1978 conference that grading procedures in the future had to recognise that dark and strongly flavoured honeys might be highly desirable in various overseas markets.

"We intend to go back to all the groups in the industry," said Mr Walton, "to ensure that a set of regulations is prepared which is acceptable to everyone. I can see it being a major part of my work this year."

The regulations are promulgated under the provisions of the Apiaries Act. When they are redrafted they will also bring honeydew under the definition of honey. This will put honeydew under the provisions of the grading system and bring New Zealand in line with other countries where Mr Walton said honey dew is regarded as being "honey".

FROM THE COLONIES

WEST COAST

The season has finished up with fair crops of honey in central Westland but with the crops at either end tapering off to very ordinary or less.

With the lack of rata the crop wasn't expected to grade as high as the previous year, but with the long spell of cold wet weather during the kamahi flowering, preventing the bees from collecting any appreciable quantity of its nectar, many beekeepers expected a higher grading than what they got, and have talked of having some regraded.

The first attempt at holding the annual meeting in Hokitika was a washout because of floods. The second attempt, although representative, was not well attended, but there were enough present for it to be held.

Alan Braid of Franz Josef was re-elected president and Peter Lucas Jr. secretary-treasurer in place of Rod Buchanan who didn't wish to be re-elected. Many thanks for Rod's stearling service in the past.

Peter Lucas Snr. was retained as correspondent for the "Beekeeper" and Glassans for the newspapers and radio.

Jack Marshall, a very regular meeting attender was unavoidably absent because he was taken to hospital the night of the meeting. We all hope he is well again.

We are well into May and no frosts and exceptionally mild weather. The red rata vine has been flowering for a week or two so, although the bees are down in numbers, but with no drones to feed, they will be storing some honey which could help out in the spring.

The deadline for these notes is May 14, a Sunday, but judging by the rain that is falling and radio reports of roads blocked by floods and slips both north and south of here there is little hope of getting them away by surface mail unless it be by jetboat.

One apiary in Harihari is half submerged in floodwaters and no hope of getting near to do anything about it.

Peter Lucas,
Harihari.

Catfish and bees imported

BY THE mail steamer Australia, which arrived in harbour yesterday morning, five catfish have come consigned to the Auckland Acclimatisation Society.

Fifty of these curious American fish were shipped at San Francisco in a large tub by Mr Hugh Craig, and were placed under the care of Mr Edward Parsons, of Te Awamutu.

Notwithstanding the attention paid to them 37 died during the first 24 hours and 3 since.

Two hives of bees, each hive being ruled by an Italian Queen, were also shipped by Mr Craig, and we were happy to learn the industrious little communities have not been visited by any epidemic, but have safely surmounted the ordeals of sea voyage.

NZ Herald, August 13, 1877.

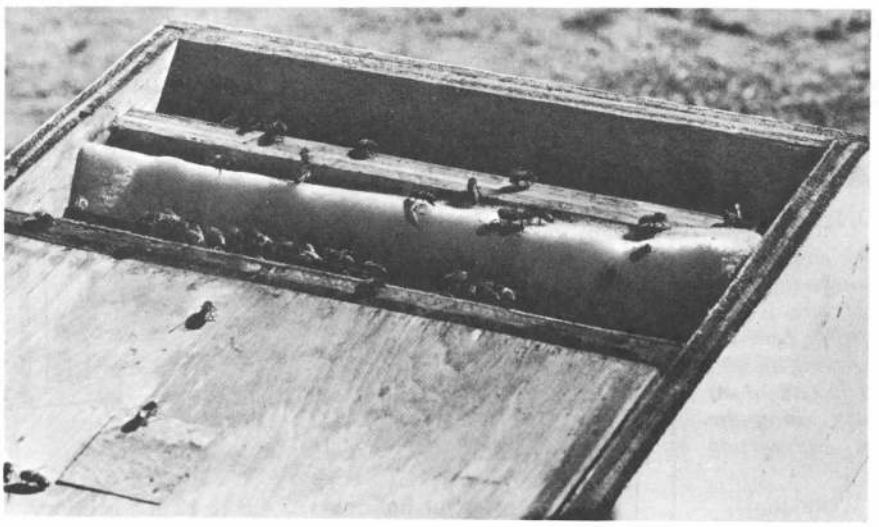
Mr Wardecker covers beehives with scrim before insecticide spraying. The covers were the most successful single treatment for preventing losses, however, a combination of treatments proved most effective.

Good news for beekeepers

INSECT OUTBREAKS in agricultural crops sometimes spell doom for colonies of foraging honey bees. Doom — because about the only recourse growers have of controlling such outbreaks is applying insecticides. And it is the contact-insecticide that takes its toll of bee colonies.

All that could change, however, with recent findings at American Department of Agriculture bee research laboratories at Tuscon, Arizona, and Laramie, Wyoming, where scientists have developed a method of protecting the bees before and after insecticide applications.

Beekeepers in Arizona and Southern California one recent year suffered severe losses when an outbreak of pink bollworm on cotton caused a large increase in the use of insecticides. It was estimated that 70 000 colonies of bees were killed or damaged that year in California alone from repeated spraying.



The waterer sits on top of the hive, contains approximately 15 litres of water, and is constructed of wood and foam rubber.

Some years, cotton is sprayed 15 or more times at five to seven day intervals in the Salt River Valley of Arizona. Because of this spraying, the number of colonies of bees in the State dropped by more than half — from 110 000 in 1964 to 53 000 in1971 — and colonies were virtually eliminated in many cotton areas of Arizona.

Scientists at Tuscon and Laramie are in the midst of a study designed to eliminate these losses. The study is particularly timely now since bees are playing an increasingly important role in cotton production.

Cotton growers are looking more and more to bees to pollinate the significant Pima cotton crop and when hybrid cotton becomes practical, it will be bees that play the important pollination role in the production of hybrid seed. Other countries use hand labour to produce hybrid seed. Labour costs in America almost rule out manual pollination.

It is impractical to move bee colonies during spraying operations not only because of the frequeny of the applications but because there is really no place to move them.

With that in mind, entomologists Joseph O. Moffett, Bee Research Laboratory (2000 E. Allen Road, Tuscon, AZ 85719), Adair Stoner, Lonnie N. Standifer, and William T. Wilson devised 16 treatments to protect bees from insecticides.

The researchers used a 480-acre planting of cotton in which to place the colonies — 10 colonies to each treatment. That field underwent five insecticide applications during the time of the trials last summer.

The most effective treatment among the 16 was a six-way combination which included scrim covering, pollen feeding, shade, top waterer, bottom board, and syrup feeding.

Since the colonies did not take syrup during most of the test, syrup feeding could probably be eliminated from this treatment.

Scrim covering confines the bees to the hive — until 12 hours after the insecticide application — while the pollen and water sustain them for the period of confinement.

The shade keeps them out of the hot Arizona sun and the bottom board — which gives bees additional room at the bottom of the hive — provides a clustering space for field bees at night and during heat waves or confinement when they cannot fly.

Not only did the 10 colonies in this treatment survive, they gained weight and were strong after the five insecticide applications that started in late July and ended in mid-September.

Most of the colonies in the other treatments — single or combination treatments of the above — were either killed or reduced to one or two frames of bees/colony with the exception of those covered with scrim. Most of the scrim-covered colonies survived but lost weight. — *J.P.D.*

MAY 1977,
U.S. AGRICULTURAL RESEARCH

No joy for CO_2 inseminator

JOHN SMITH, the Christchurch-based MAF apiary instructor who has been specialising in artificial insemination techniques for queen bees, is not enthusiastic about a suggestion made by a "NZ Beekeeper" subscriber that carbon dioxide gas could be used to open the vagina of the queen in order to facilitate insemination.

The suggestion was made by George Nichols in a letter to the editor which was published in the June 1978 issue.

Mr Smith replies as follows:

"The idea of a double syringe tip to enable carbon dioxide to be used to blow the vagina open of a queen to assist with A.I. would I feel, have little merit because:—

- The high cost of double tips, the present tips already cost approximately $20 each and are easily broken.
- Very little damage is done to queens with the present method, so there seems little need to change.
- With a high degree of skill, it is possible to insert the present tip

turn to page 16

BOOK REVIEW

KEEPING BEES *by Peter Beckley*
BEEKEEPING *by Frank Vernon*

Handy sized books for beginner beekeepers have not been easy to obtain lately but this shortcoming has been overcome by recent arrivals from British publishers.

Not many good books on beekeeping have been produced in the British Isles during the last decade but last year saw several of them.

These two arrivals are attractively produced, easy to read, pocket-sized and quite well illustrated.

For the beginner, they have most of the essential imformation explained in concise terms associated with clear drawings. Those drawings which show the correct position of hands, feet and equipment and how to move them are very useful to a learner; hints like "holding the smoker between the knees while working" are small but really useful details for the tyro.

On page 29 of "Keeping Bees" the author writes of "cane sugar in the nectar". I did not see any sugarcane growing in Britain or Scotland and I did not see bees collecting nectar from sugarcane in the tropics where it grows profusely. Please, somebody tell me — does cane sugar come from anything other than sugarcane?

He mentions, on Page 43, the use of "Package Bees from New Zealand". With this start in advertising, somebody should start the trade.

This book is particularly well printed on excellent quality paper with good drawings and sewn bound in a hard cover with a beautiful dust jacket.

Frank Vernon has used 40 of his 220 pages of "Beekeeping" on "Swarms and swarm control". Perhaps this is an indication of the performance of UK bees or is it a reflection of the habits of the beekeepers? It is too much. Better to adopt modern colony management that has reduced the need for extensive colony manipulation.

He encounters difficulties in the acceptance of young queens by full sized colonies. There are many New Zealand beekeepers who would welcome the opportunity to show the methods they

see overleaf

ANATOMY AND DISSECTION OF THE HONEYBEE

by H.A. Dade, published by International Bee Research Association, 1977 reprint, first published 1962.

MOST PEOPLE recognise that the honebee efficiently collects nectar and pollen from a wide range of floral sources. However, relatively few will have observed the bee under the microscope and seen how remarkably well it is adapted to its specialised mode of life.

Take the worker bee, for example. It has mouthparts that include a long proboscis capable of reaching into deep corollas to obtain nectar inaccessible to insects with short tongues. Its mandibles are multipurpose and equally capable of shovelling pollen into the mouth, biting and kneading wax, collecting propolis, or feeding larvae. Its body is covered with hairs that trap pollen and its hind legs are modified to comb the pollen from the hairs and form pellets that can be handled easily within the hive. At the tip of the abdomen is a sting for use in defence of the colony.

Internally, the worker has glands that produce brood food for the larvae and enzymes to convert nectar into honey. A crop capable of great distension holds the nectar until it is regurgitated at the hive. The crop also contains a remarkable valve that removes pollen from the nectar. At the rear of the abdomen, the rectum, also capable of great distension, holds faeces until a cleansing flight allows their discharge and thus prevents the contamination of the hive.

The queen and drone too, like the worker, have adaptations to suit their modes of life.

These fascinating anatomical features and many more can be seen with the aid of a low-power microscope. It was with the aim of encouraging others to see for themselves, that Mr Dade wrote his book.

This edition is almost identical to the original publishing in 1962. However, to up-date it without altering the original text, five pages of notes and corrections have been added.

Written for the beekeeper and those without formal training in zoology, this work describes the anatomy of the honey bee in simple terms. Clear drawings show the internal and external anatomy and enable dissections to be undertaken without supervision.

Realising that very few households own a microscope and that commercial models may be expensive, Mr Dade describes a method of converting a pair of field glasses into a monocular low-power microscope. He also shows how to make a simple spot lamp from a car lamp bulb, a transformer and a mirror.

The IBRA are to be congratulated on reprinting this masterpiece. Although it is essential reading for candidates sitting for the New Zealand Diploma in Apiculture, it will fascinate all those interested in expanding their knowledge of the honeybee.

Reviewed by Pat Clinch.

from page 14

without the aid of a probe. In fact the operator I met in Poland who could inseminate 120 queens a day never uses a valve probe.

"As Mr Nichols is having trouble with damaged queens, I wonder if the flow of gas he is using to anaesthetize the queens is too hard. The gas must be able to flow pass the queens in the holders, or as I found to my cost after killing about 20 queens, the vagina area becomes blown up tight and it is nearly impossible to insert the probe or syringe without causing damage to the surrounding membranes.

"I would suggest to Mr Nichols, if using imported American equipment, that he checks that gas can flow past the queens in the holders."

from previous page

use to obtain a very high percentage of successful acceptance of introduced queens.

In both books, allowance must be made for hive specifications that are not as acceptable as those used in USA, Canada, Australia and New Zealand where the Langstroth style hive is almost universal. Some day this will be adopted in the British Isles — their progressive beekeepers already have.

Both books present good background information for successful beekeeping.

KEEPING BEES (Garden Farming Series) by Peter Beckley — 125 pages — 1977. Published by Pelham Books Ltd, 52 Bedford Square, London.

BEEKEEPING (Teach Yourself Series) by Frank Vernon — 224 pages — 1977. Published by Hodder and Stoughton Ltd, 47 Bedford Square, London.

Reviewed by Chris Dawson, Timaru.

A look backward at pollination

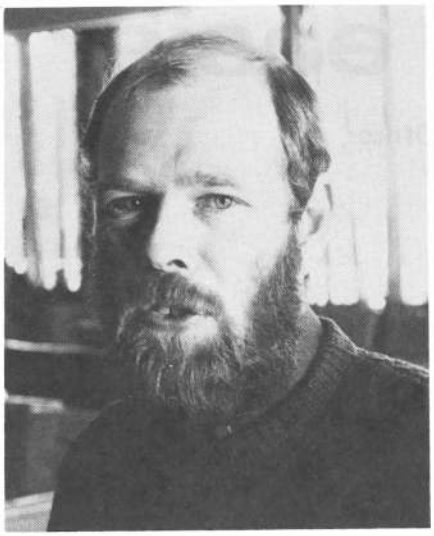
Our knowledge of pollination has been accumulated relatively recently. Even in the 18th century, people had little idea of what transpired between flowers and bees. In 1787, a German pastor, Kristian Konrad Sprengel, looked into the flower of a wild geranium and noticed hairs on the bases of the petals. He decided the hairs must be there to prevent water from running into the flower, much as his eyebrows kept sweat out of his eyes, but he could not decide why the flower would benefit by such hairs. He thought about this matter and other botanical problems so much that his congregation complained about his poorly prepared sermons. Later, Sprengel noticed the yellow ring around the centre of the forget-me-not blossom, and the yellow mark in the throat of other flowers. He saw a liquid in the centre of the flower that was sweet to his taste. Some early writer had said that this floral juice was poisonous and that bees benefited the flowers by removing it.

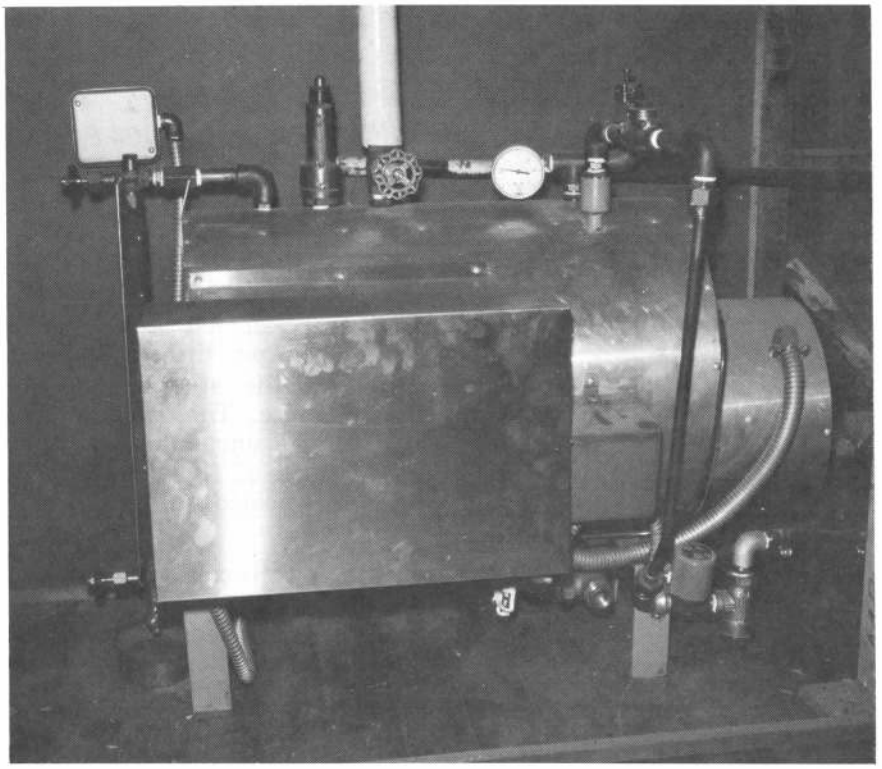
Gradually, Sprengel put all his observations together. The spots seemed to indicate where a bee would drink, while the hairs kept rain water from diluting the sweet liquid. The pollen grains left by the bees, rather than the removal of the liquid, provided the true benefit for the flowers — pollination.

Pastor Sprengel wrote a book about his observations. However, instead of renown for his writing, he acquired only problems. Scientists ignored him, he lost his pastorage, and he was forced to teach languages and conduct botanical field trips on Saturdays to make a living. Much of our present knowledge about pollination has been built on the observations made by Konrad Sprengel during his lifetime, which ended in 1816.

This story is well told in two books that you might find interesting: *Reading the Landscape of Europe* by May Theilgaard Watts (Harper & Row, 1971) and *The Story of Pollination* by B.J.D. Meeuse (The Ronald Press, 1961). I have drawn on them for the information about Sprengel's life and work.

— E.R. Jaycox, Extension beekeeping specialist, University of Illinois.





An automatic electric boiler unit

by T.G. Bryant,
Apicultural Advisory Officer,
GORE.

MOST BEEKEEPERS use steam in their honey house to heat uncapping knives, honey warmers, wax reducers and for cleaning up the dross at the end of the day. Oil is the predominant boiler fuel used, though wood and coal-operated boilers can be found in some areas. Electricity is used mainly by those beekeepers with small plants.

The expense of operating an oil-fired boiler has, over the last few years, made electricity more attractive even though we do appear to be running out of options for the production of this source of power. Ian Spence of Wendonside, Southland, required a boiler of medium capacity that was clean, could be installed without alterations to his existing buildings and be operated with the minimum of attention.

After looking at many options available to him, Ian purchased and installed an automatic electric boiler manufactured by Mercer Bros of Christchurch. The only requirements necessary to install the boiler in Ian's shed were to enlarge the existing three phase switchboard and to connect the shed to a high pressure water supply capable of exceeding the operating pressure of the boiler. The boiler itself only required a floor space of 1.5 metres x 0.6 metres and is housed in a room next to the extracting plant.

The boiler is a completely automatic 12 Kw electric steam generator capable of producing 690 kPa. Operating pressure in Ian's plant is 200 kPa (approximately 30 lbs p.s.i.) and a full head of steam is produced in 20 minutes from cold.

The steam heats the uncapping knives, honey heaters and hot water used for washing up.

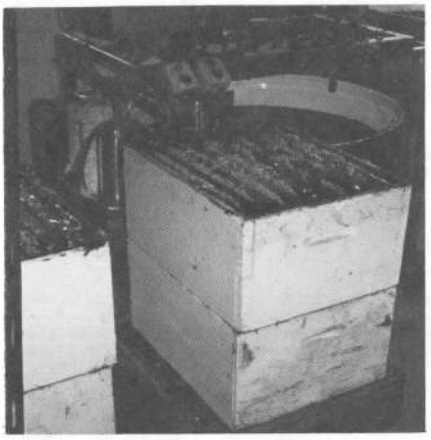
For a normal extraction run of three tonnes a day, Ian says the boiler is only operating at half to two-thirds capacity. To more fully utilise the boiler it is intended to feed the exhaust steam into a water cylinder. The hot water produced will be recycled into the boiler using an injector pump and using this water for washing up. This should lower his present power consumption by increasing the boiler's efficiency.

The cost of the installed unit was approximately $2 000.

Making the job easier

by Andrew Matheson, Apicultural Advisory Officer,
Nelson (Formerly Hamilton)

1. The Robinson hydraulic super lifter



ALMOST ALL beekeepers end up with a bad back sooner or later, and it's not surprising when one considers the amount of heavy lifting and stooping involved in the job.

Rather than becoming resigned to the inevitable, some beekeepers construct gadgets designed to take some of the wear and tear that their backs would otherwise suffer. There are many such devices, and two are discussed in this article. One lifts supers in the honey house, and the other is used to lift hives in the apiary.

Mr Ray Robinson, a commercial beekeeper from Waihou in the Waikato, designed and built a hydraulic super lifter to cut out much of the stooping in the honey house. The lifter is adjacent to the uncapping machine, and a stack of four supers on a pallet is wheeled on to the lift at floor level.

The top two boxes are dealt with in the normal fashion, but the next two are lifted up in separate stages. The super from which frames are being taken is thus always at a comfortable height, which eliminates stooping and back-bending.

Like many beekeepers' gadgets, this super lifter was made from things which happened to be available. The "heart" of the unit is a 13 mm gear pump from a spray unit, powered by a 375W (½hp) electric motor. A 75 mm pulley on the motor, and one of 100 mm on the pump to provide about the right speed. The motor and pump are both situated below the floor level, as Ray's honey house has a wooden floor about a metre off the ground.

The actual lifting mechanism consists of a 50 mm stainless steel pipe (with a smooth interior) into which fits a 38 mm pipe, with a leather bucket washer providing the seal.

On the other end of this pipe is a 60 cm x 60 cm tray of 10 mm plate steel which supports the pile of supers. A further refinement on this appliance is the installation of a limit switch. Stops on a guide rail of 25 mm square steel ensures that once turned on, the lift stops automatically at the next "level".

The on/off switch is mounted on a piece of 25 mm square steel bolted to the floor within easy reach of the operator. This also supports a plastic valve which can allow the hydraulic fluid to return to the reservoir, thus lowering the lift.

The reservoir is a 10 litre air tank from the vacuum brake system of a truck, but a container of half that size would have sufficed. The hydraulic fluid flows along 13 mm alkathene water pipe, and copper pipe of the same size above the floor.

It's impossible to cost out such a device because of the large "do-it-yourself" component. But whatever it cost, it was still cheaper than a new back!

Shifting a hive the easy way.

2. The Finlay-Mitchell lever lifter

SHIFTING HIVES is never the most popular job for a beekeeper, particularly when it means being in close contact with thousands of angry ladies!

A simple but effective tool to make the job a lot easier and more comfortable was developed by Norman Finlay, whose paraffin wax dipper featured in the last issue of the "Beekeeper". It has been further refined by Bryan Mitchell, another commercial beekeeper near Hamilton.

Two lifters are used, one gripping at the mid point of each long side of a hive. These ones are adjustable for hives of one, two or three full-depth supers, although lifters could easily be made to accommodate different sized supers. The vertical bar has slots cut to correspond to the distance from the underside of a bottom board to the

top of a lid. Three slots permit adjustment for different types of lids or bottom boards.

The lid clamp is basically a fork of 40 x 5 mm flat iron, provided with a handle of 25 mm waterpipe. On the open end of the fork is a free-pivoting pressure plate, with a rubber surface to provide grip and protect the hive lid.

The illustration gives a view of the lid clamp from above, showing the pivot bolt which engages in a suitable slot.

The bottom tyne plate, which pivots freely at the lower end of the vertical bar, is slipped under the bottom board and held in place by the toe of a boot until the lid clamp has been located in a suitable slot and pressure has been exerted on the lid by lifting the handle. Fig. 2d is a side view of the bottom tyne plate, which is made of 5 mm thick steel, with two "claws" made of 25 mm angle iron cut to shape and welded on.

With the aid of these lifters, a hive can be lifted and carried with no bending or stooping. The long handles also make it easy to stop the hive tipping over, without having to be right next to it.

Two planks, about 2 metres apart, allow two people to carry hives up on to the back of a truck. Loading hives on or off the truck can be done easily and quickly, without the need for strapping the hives. With a single lifter, one person can drag the hives across the truck deck, and can also position hives in the apiary so that two people can get around to lift them.

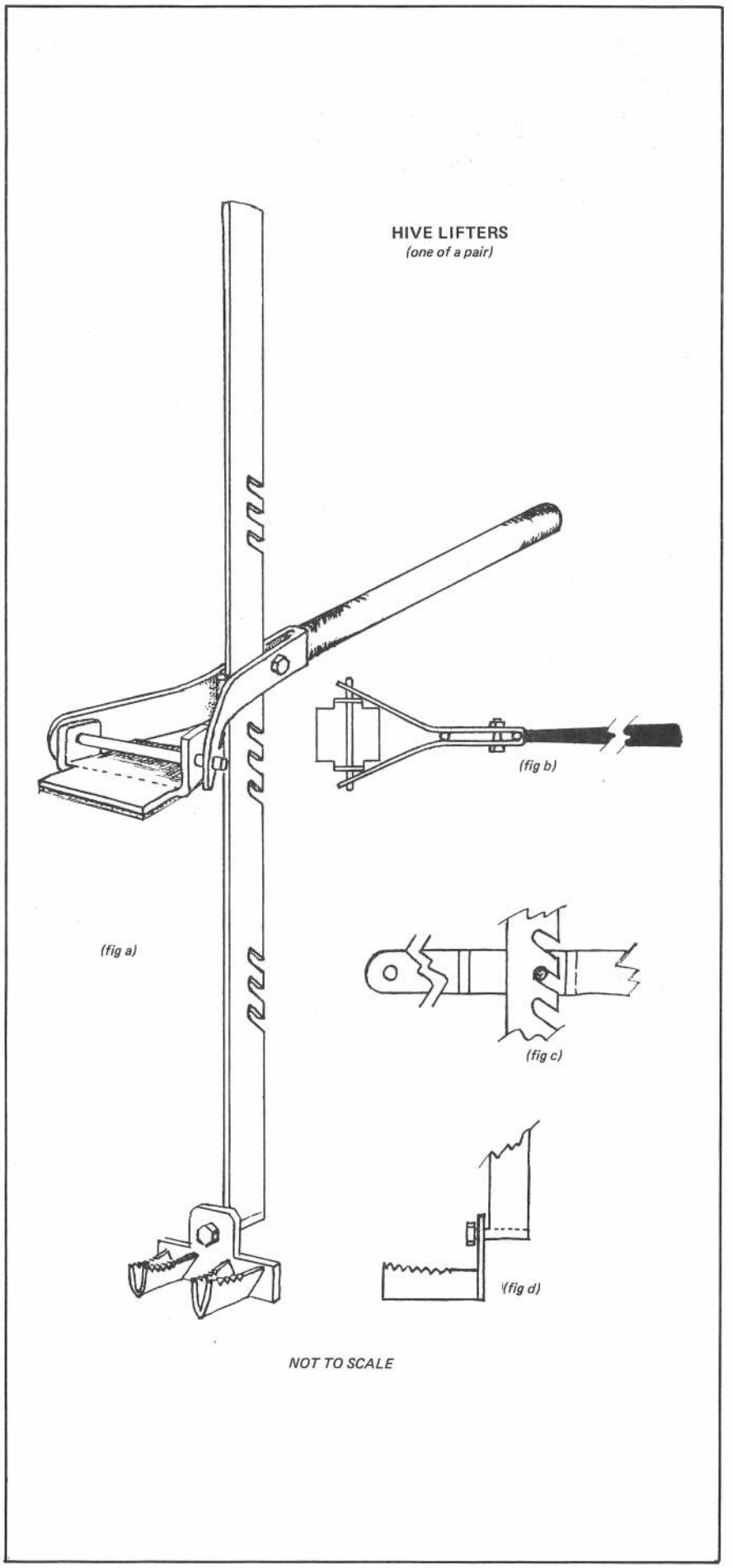
Working drawings of the lifter can be obtained from the author or from Mitchell's Apiaries, 25 Saxby Road, Hamilton.

ACKNOWLEDGMENTS

Ray Robinson and Bryan Mitchell for freely providing information, and the latter for the sketch.

ILLUSTRATIONS

The super lifter at work. Note the on/off control and release valve immediately behind the two supers.



A FRESH START

AT THE END of January/first week in February there were three swarms around the neighbourhood, one settled in a nesting box, one in a phebalium hedge, and a third reported as being in a cardboard box at a local housing yard.

THE HUMAN ELEMENT

If someone knows you keep bees and rings up to say they have a daughter who is allergic to stings and a swarm in the hedge by the front door, it is very difficult to say that neither the daughter nor the swarm is yours and could they please find someone else.

None of these swarms need have occurred. It is bad enough to have them in the swarming period but to have them out of season shows gross incompetence, poor public relations, lack of understanding of hive regime, and a loss to the beekeeper(s) concerned, whoever they might be.

Why these swarms? At this time of year?

We cannot tell the history of the hives from which these swarms came, but as this is a built-up area, it is unlikely that feral colonies would go un-noticed and the inference is that they came from hives. Now, I can think of only a few reasons why a hive should swarm at the end of the honey flow.

- The hive is headed by an aged queen who was failing at this precise point in time.
- Disease was rampant.
- They were hungry swarms.
- The hive had been so harried and disrupted that they took off in desperation.
- The queen had been killed in manipulation.

There may be others you can think of, but the point is *that all these are under the direct control of the beekeeper.* Hence you are responsible, not the bees.

PUBLIC RELATIONS

I would like to delve into the public relations angle a little more deeply. The point I would like to make is that there are by-laws in most areas to limit the number of hives kept and to allow the prohibition of any public nuisance, but these laws merely provide legal backing for what must be regarded as the duty of every beekeeper, that of keeping his bees in a seemly, orderly, discreet manner at all times.

Good fences make good neighbours

It is not enough to say that for 75 per cent of the time they are no trouble to anyone, if for 20 per cent of the time they are a confounded nuisance to neighbours and passers-by and for 5 per cent a positive danger. Responsibility is a full-time thing and this applies whether you are in a rural or an urban setting.

Indeed, the rural setting may do more ultimate harm to beekeeping in the long term by releasing swarms to turn feral, becoming disease centres and spread foul brood in ever-increasing circles. Swarms in an urban setting are more likely to be detected and either taken or destroyed.

URBAN CHARTER

The American Bee Journal for October 1976 contained an interesting article on beekeeping in an urban environment by Fred I. Peabody of the Long Island Beekeeper's Club (and those who know New York's Long Island will agree there is nowhere more urban than that).

Contained in that article were suggestions for a good neighbour policy, and its provisions for residential areas are:

1. No more than four hives of honeybees shall be maintained on any lot of ¼ acre or less.
2. No hive or honeybees shall be maintained within 10 feet of a boundary line.
3. A hedge, fence or other obstruction 6 ft high must be placed in front of colonies near property lines so the bees will fly high in the air.
4. No hive of honeybees shall be maintained unless an adequate supply of water is available within 20 ft of each hive between March 1 and October 31 of each year.
5. A written record including the date of inspections shall be maintained by the owner and shall be available for review by authorised agents.
6. No hive of honeybees shall be maintained in a residential area in such manner as shall constitute a substantial nuisance.

All good, sound rules and, allowing for change of seasons and metric measurements, much of it applicable here. I myself would go much further on point 5. and make all amateur beekeepers maintain written records of all operations by hive. That way it would be easy to see if the minmum necessary for good beekeeping were being done.

These rules really seem no more than common-sense and would be agreed to by all ethical beekeepers.

An introduction to queen management

by David Williams, hobbyists' adviser

FOLLOWING ON from my oft-repeated assertion that

- The best queens are bought queens
- The easiest system of bee management involves annual replacement with said bought queens, let us now talk of:

QUEEN INTRODUCTION

TIMING

It could be said that the end of February/beginning of March is too late for queen introduction and fails to give the queen time to settle down and establish a good laying pattern before winter. This is possibly true for some areas, if it is important at all, but for this part of the North Island it is good.

The honey season here lasts from December 6 to the end of January after which it tails off dramatically in a normal year, if there is such a thing. You won't want to disturb the bees while this is on, nor directly it is over so it is best to wait until the flow is well over.

This gives you an excellent opportunity to confirm the winter stores situation as you change queens, while there is still plenty of fine weather before conditions become too marginal and slow down the hive appreciably. Even so, there were seven or eight days as late as the first half of May this year when it would have been quite possible to go into the hives had there been any necessity but, naturally you have to choose exactly the right conditions.

It could be said that the best times are either at the tail end of the flow when the honey is still coming in, or several weeks later when the bees have resigned themselves to the fact that it isn't. In between they can be a bit touchy.

Re-queen too early and there is a chance that they may not accept her and still swarm. Re-queen later but under the right conditions and the operation should be smooth and trouble free.

If you are quite certain your ordered queens are well and truly on the way, there is no reason why you should not assassinate your present queen insert the new one later — indeed, some authorities claim a queenless gap of three to four days actually aids acceptance. But, again, if you can get spring queens early enough — and there are reports of swarms here before the end of September, so it must be before that if it is to be totally effective, then this is certainly the best time of all.

"Space is limited and I hope to allocate the next few articles to simple queen rearing techniques for those who wish to raise their own replacement queens for their own hives once a year and once a year only.

"As I still recommend that the best thing for the amateur is to buy in his queens each and every autumn, the first article, an introduction to the main thesis, will be on various aspects of this."

Introduce them, wait a full week, check for acceptance, and the bees should be trouble free for the rest of the season apart from any rearranging you want to do.

Remember that whatever timing system you adopt, you must adhere to. It is no good using spring queens one year and autumn the next, unless you are prepared to accept responsibility for the extra trouble you are going to have. Keep in routine.

Remember that the quick queen cell check (sliding the second box slightly forward, tilting it up, examining the bottom edges of the frames for cells) is not in itself 100 per cent effective, but combined with autumn re-queening, can be 99 per cent. So what you are doing is reducing the odds to an acceptable limit — not your limit, but the neighbours!

INCREASE

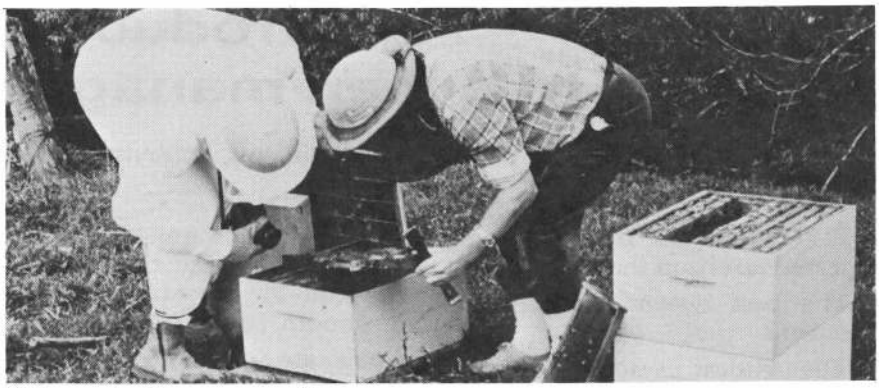
Every morning, before breakfast, stand in front of the open window and chant 50 times, 'I am an amateur'. This will put you in the proper frame of mind for the day, even if the day does not happen to include bee-keeping.

Nowhere is this simple fact more evident than in the desire for increase. Elsewhere it has been recommended that you never keep less than two hives. Unlike the commercial beekeeper who may depend upon dramatic increases to build up his stocks and plans his tactics accordingly, you are unlikely to want to double your hive numbers every year (and if you do, your best method is to buy the appropriate number of nuclei from some accomodating commercial breeder in spring).

No, you are more likely to want to increase one to two, or perhaps two to three. Well, that's fair enough and very simple:

At your March re-queening you merely subdivide your one hive, or take three frames of brood with adhering bees from each hive if you have two and put either your half or your two times three into a spare box, fill up the gaps with store-filled comb in both parent and new hive boxes, add extra stores and spare comb in a second box on each, and re-queen both old and new as if they were all now queenless, which they are. Close entrances down to 1 cm, block entrance to new hives on new site lightly with grass, and leave any major disturbance until spring.

The main point to remember is that you cannot successfully sub-divide a small hive in autumn. It must be a full-sized, well-filled hive with plenty of bees and stores. The smallest sub-division you can possibly make do with is one of four frames only, but six is far better and will winter better and build up better for the next season.



"There she is. . . . . "

THE INFLUENCE OF ROYALTY

Why this emphasis on the queen? After all, she is merely a streamlined egg-laying machine, there only to provide a continuing and expanding population of bees.

True, but not the whole truth. What gives the colony its special characteristics? What makes the inhabitants good or bad tempered, good or bad workers, pro-or anti-swarming?

The queen. Not by the force of her personality but by the exudates of her body, her pheromones.

PHEROMONES

The term "pheromone", coined in 1959 from the Greek "pherein", to carry, and "horman", to excite, is widely accepted as including substances secreted by a living organism to affect the behaviour of other organisms of the same species, and numerous publications have been devoted to pheromones of the honey bee, notably by Butler, Gary, Wilson and others.

It has become clear that this is a very complex research field but it does offer the hope of better hive management in the long term.

At the moment the apiarist manages hives to the best of his ability but this is physical management involving re-queening, manipulation of boxes and frames, rearrangement of brood, stimulative feeding, etc.

By the use of synthesised pheromones it may be possible to stimulate brood rearing up the honey flow and then cause it to decrease or cease at a specified rate according to dosage, to prevent swarming, to re-queen without de-queening, to induce controlled mating at a specified time, to restrict or encourage drone rearing, to render the bees docile, to intitiate honey gathering, to restrict the use of propolis, to unite two colonies by spraying them with the right mixture of citral isomers, or even to lure wild colonies from the bush by placing a lure at some convenient spot.

Pheromones are activators, being both positive and negative. This is obviously so — if something is being done, something else is not being done.

Basically, pheromones in the bee world are minute trace elements produced mainly by the queen. They determine the temper of the hive and everything else about it.

The attendant bees lick the exudates of the queen and redistribute them around other members of the hive, a continual production and distribution of chemicals at the molecular level, the absence of which is immediately noticed and reacted to.

The layman may not recognise, or need to know the formula for such exotic substances as 9-oxodecenoic acid, or even 9-hydroxy-trans-2-decenoic acid, the first of which is a mating attractant, the second a clustering encourager, but these obviously have potential for management purposes in their own distinctive ways.

Who knows, one of these days it may take a couple of shakes of bottle A, a dash of bottle B, and that's your beekeeping over for the year.

And the conclusion from one mating study that "males preferred live and active females" should not surprise. Bees are only human after all!

WHY PHEROMONES?

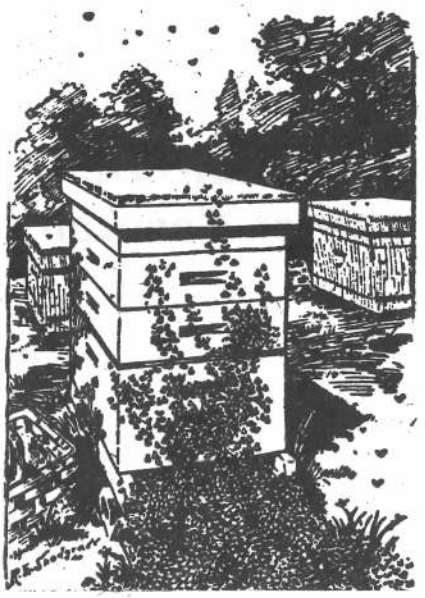
The reader may well ask — why did nature invent pheromones? The simple answer is that, for insects, they work and, once again, it comes down to the efficiency of effort in short-lived organisms.

There is just no time for an insect to "learn". Instead he/she/it must "respond". The drones must respond to the sex-lure of the virgin queen, the workers must respond to the ovulation-inhibiting substances circullated by the queen, the nectar gatherers must respond to chemical and other signals given them by scouts, and so on.

In the social insects there are obvious advantages to chemical communication, where a signal means one thing and one thing only, where every individual who receives that signal is responsive, where communication circulates rapidly and easily from one source within one community.

Such simple lines of communication means that a community is aware at all times and, almost as important, is aware of any interruption, so being able to react to meet a new situation, within the limits of their abilities.

The power of pheromones is not always appreciated. One minor example picked at random is that of the male gypsy moth, who may be lured from up to 4 km away by female gypsy moth sex attractants — a feat not yet duplicated in human society as far as we know.



Readers' queries

David Williams, our resident hobbyist adviser, is willing to answer readers' queries about problems they have with their hives. "My articles are designed to be both practical and provocative," he says. "There may be many points amateurs would wish to raise and would do so if told to write in. I would be happy to provide answers to the best of my limited ability and can always call on the literature or the experts for the really tricky ones."

Mail your questions to: "A Fresh Start", 26 Otonga Road, Rotorua. They will be answered by Mr Williams personally and suitable ones submitted for publication.

Dear Mr Williams,

How refreshing it is to read your words of wisdom in "The NZ Beekeeper". I would like to know what you have to say on the perennial question of extracting manuka honey.

Setting up a hot room etc is beyond my means. Moving my bees to a manuka-free area would cause difficulties and involve a lot of travelling (besides, think of all that lovely honey I'd be missing out on).

This year I resorted to scraping it all off the foundation into a borrowed Baines reducer — a very time-consuming and back-breaking (to say nothing of the poor combs) process.

What would you do if you were me?

Yours,

Steve Schapel,
Collingwood.

A pleasure to hear from you, but if you expect an easy answer to your query I am afraid we must disappoint you, although rumours of techniques for handling heather honey in the U.K. involving high-frequency vibration during extraction are around.

Manuka honey is thixotropic, as you know, having the property of being jelly-like when at rest and liquid when shaken or stirred.

Earlier techniques depended upon reciprocating plungers, or your system of scraping and separating, or draining, pressing or centrifuging, or some form of presentation that did not require any of these, such as cut-comb or sections.

You don't say how large your operation is, but do ask what I would do in your place. I would go for sections. They may reduce the total crop somewhat and need the holders, thin foundation and surrounds, but are easy to prepare, easy to store, easy to eat, and easy to sell if you have that in mind.

Section supers over two brood chambers are relatively simple to manage and the whole process need take no more effort than your present system.

However, there may be other beekeepers who have found a better answer to what you so rightly call a perennial problem and who would be willing to share their experiences with the rest of the world.

All the best,

David Williams.

In brief. . . .

KILLING BEES WITHOUT RUINING HONEY

I frequently receive enquiries on killing wild swarms or, in certain cases, owner-but-not-bee-abandoned hives without rendering the honey unfit for human consumption.

The advice of Nigel Cummins, our well-qualified chemical analyst, is to use either:

- Tri-chlor ethylene, used extensively in the dry cleaning business (and also in the extraction of edible oils from seeds), or
- Chloroform, which would work equally well and is perhaps easier to obtain from your chemist or pharmacist.

So it depends on your source of supply which you use. Both are highly volatile and therefore kill rapidly without leaving residual traces in the honey. Points to note are:

- Both have heavy vapour and it is therefore best to introduce at the top, although this is not vital to success.
- Dosage is approximately 30 ml. which means you put in about a tablespoon.
- These chemicals are also good for killing off wasps. In this case Nigel recommends putting in half a cupful and immediately stuffing the hole with sacks to stop them retaliating!

BENZALDEHYDE FOR SUPER CLEARANCE

An expansion of my remarks on the use of benzaldehyde in the last issue. I was less than enthusiastic.

I now notice that Hooper claims that more than a teaspoon of benzaldehyde overpowers the bees sensory nerves and clearance will not be complete. He also says this amount will serve for clearing for the full day.

This amount applied to hessian squares the size of the super would obviously call for some form of atomiser to spray it on, or some severe dilution of it.

On the other hand some authors are of the opinion that benzaldehyde works best at lower temperatures and of course this would apply particularly in New Zealand and other sub-tropical areas compared with England.

Thus the question may not be so much one of amount as of intensity, or speed of volatilisation. Must get a few volunteers to carry out tests next season.

As a preliminary Bruce Rae kindly offered to test on his hives and says that benzaldehyde definitely wins out over the phenol he usually uses as the weather cools down somewhat.

He:-

(i) dilutes it 50/50 with water
(ii) put a foam rubber strip on the clearer board to get a better seal when placed on the super.

Presidential address

by Percy Berry, president, National Beekeepers Association of New Zealand.

IN MY ADDRESS to Conference last year reference was made to the fact that much had changed for the better. I am now pleased to report that our association has made further progress towards political and financial stability.

Unfortunately in the marketing area which falls outside the control of this association the industry is currently embroiled in one of its periods of political confusion. If we fail to put this matter right immediately there could well also be another period of economic collapse.

In the past three years we have made a remarkable recovery from poverty to prosperity. This has been achieved by many people working together for the good of the whole industry. The present lapse is regrettable. Later in this address I will suggest a solution.

During 1977—78 New Zealand beekeepers have been favoured with one of the better production years. Although production costs have risen, better prices are being received and this is being reflected in greater confidence and greater investment in the business of beekeeping.

There is room for greater honey production in New Zealand, particularly from bush nectar sources. During my recent visits overseas I have been surprised to find the extent of the prospective markets for New Zealand honey in general.

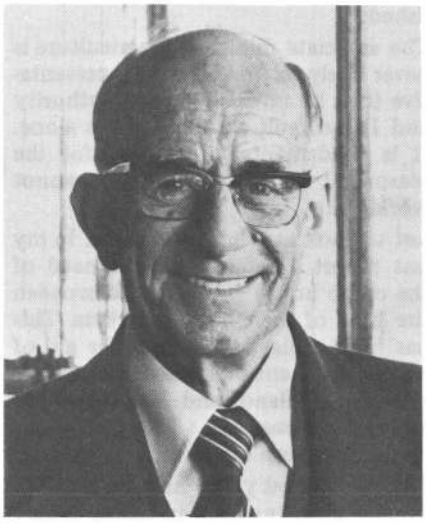
Most of our so-called problem honeys which we have in the past used for feeding our bees may well become a problem only in the sense that we are not able to produce enough to meet the demand. For instance, I would expect the dark-coloured rewarewa honey to take its place alongside our clover honey in popularity. The industry is of course famous for the quantity and quality of the clover honey produced from comparatively small areas.

At a time when our country is experiencing a downturn in its economy it is encouraging that our small industry is making some worthwhile contribution in increased production and exports.

During the year the association and others applied for increased exports taxation incentive on exports of retail packs of extracted honey. Approval has now been granted and exports from April 1, 1978 qualify for incentives. This should encourage both exports and production.

The Honey Marketing Authority, of which I am a member, has been finding some difficulties in financing against the additional value of its throughput. The industry seems to qualify for, and seems entitled to expect, full support from Treasury. If this is not available I have suggested other means of financing.

I understand the subject is one the chairman of the Honey Marketing Authority will deal with more fully in his address.



Percy Berry

During the past year a number of beekeepers have journeyed overseas and a very large contingent attended the Apimondia Congress held in Adelaide last October. The next such congress will be held in Athens in 1979.

It is gratifying to find that beekeeping as a hobby is appealing to more people. Recreation is no longer the only reward. The trend for many years was toward larger holdings. As the economics of beekeeping improves the need for larger numbers of hives diminishes. I suggest that the minimum economic unit for beekeeping is now less than 1 000 hives. In some selected localities less than half that number, intensively farmed, could keep one man fully employed and reasonably well paid for his labours. These circumstances can continue only if we make the best of our marketing opportunities. Recently I have given much thought to what I have referred to as the current political confusion. The present situation is quite apparent from recent publications.

I have searched for a solution in the light of my recent and earlier experience. I have been actively associated with industry problems and industry opportunities for many years. The past year has been my most active, particularly overseas. This has been made possible by adequate support from my home.

As president of this association, as a member of the Honey Marketing Authority and as a director of a honey producing and exporting company, I have had good reason to be active — particularly in making the most of available marketing opportunities for all concerned.

With respect for the opinions of others it is my responsibility to state clearly my own opinions on our present position and our prospects for the future. It is not my purpose to reflect popular opinion but rather to help guide the industry to greater political and economic stability, and to help mould opinions and policies which I believe are likely to achieve those ends. Milton wrote "Argument in good men is but opinion in the making."

Firstly it is important that we understand what is involved in terms of existing government service to beekeeping in New Zealand. I hope we can reasonably claim that beekeeping does in turn render a service to the government and to the people of New Zealand. Beekeepers certainly seem to have the goodwill of the people in their respective communities.

In my view the industry is well served by the Ministry of Agriculture and Fisheries in matters relating to the production and grading of our product. It is also well served by the Department of Trade and Industry and the Ministry of Foreign Affairs in matters relating to the marketing of our product.

These are the departments I am continually in touch with both at home and overseas in my marketing work.

The disaster area for both our economics and our politics is that area where the associate minister of agriculture is placed by statute in complete control of our marketing policies. Marketing is not his field.

Marketing

I refer now to the framework of our marketing structure and make the rather obvious suggestion for its improvement. I have not yet discussed the suggestion with any of the government departments concerned.

Our Honey Marketing Authority Regulations are made pursuant to the Primary Products Marketing Act 1953. This Act provides that "In the exercise of its functions and powers, a marketing authority shall comply with the general trade policy of the Government of New Zealand, and shall comply with any general or special directions given by the minister to the marketing authority pursuant to the policy of the government in relation thereto."

According to the interpretation of the Act "Minister" means "Minister of Agriculture". Further the Honey Marketing Authority Regulations provide that the government representative on the authority "shall, in addition to performing his other functions, represent the interests of honey consumers." This provision seems to ignore the fact that the maximum price for honey on the local market is fixed by the Pricing Division of the Department of Trade and Industry.

As I understand it, the function of a government representative is essentially to represent the people as a whole without reference to whether they are producers, consumers, taxpayers, exporters, importers or all or none of these.

It is no reflection on present or past government representatives on the board that they have been required to comply with unjustifiable regulations. But the result has been a long-standing blockade of the economic channels of export of honey, even to this day of export emergency. Domination of our marketing or even involvement in our marketing by a production ministry is not sensible.

I am not impressed with arguments of precedents in other producer boards. This association of beekeepers is interested in the sale of its product which is not perishable in the sense that most primary products are. Marketing is therefore a very different exercise from that of other primary products. It has more options for both the producer and the consumer.

So long as the government representative on the Honey Marketing Authority is required to have particular regard for the interest of the consumer, in spite of the fact that those interests are properly provided for in another department of government, then his office can be nothing but that of a cuckoo in the producers' nest. Over the years it has proved to be just that.

So long as our marketing body is responsible to a production ministry, our industry will be vulnerable to unnecessary trouble and will lack necessary opportunity. There are resolutions in the authority's minute books which in my view are not a credit to the system.

One such recent resolution will be subjected to close scrutiny elsewhere. It appears to be related to the forthcoming Honey Marketing Authority election. Since voting for the Honey Marketing Authority election will take place very shortly I feel that Conference should consider seeking a delay of one month in the election to enable the true facts to be established.

The associate minister of agriculture is never likely to find a better representative than he now has on the authority and I find fault with the office alone. It is fundamentally unsound for the reasons I have outlined. It cannot work.

Let us look at what does work. In my last report I referred to the need of the comb honey producers to broaden the base of their honey markets. This has been achieved. Without the aid of our Department of Trade and Industry in New Zealand and a number of embassies overseas, little progress could have been made.

During the past year I have, along with others, been involved in selling honey in various countries and in examining the possibilities of improving the industry's marketing.

Success in overseas marketing of both comb honey and retail packs of extracted honey has been achieved with the aid of government departments having the machinery and training which enables them to give the lead and the help we need in export marketing. Beekeepers have been involved in both exhibiting their products and in travelling to the market places. Personally I have made a number of short overseas trips. The most significant new market established in my travels has already proved its worth to the industry.

It would not have been possible for me or anyone else in the industry to get that and some other markets off the ground without the aid of the appropriate government agencies. I wish to acknowledge their valuable services to our industry. Some of these government officers are living in climatic conditions to which New Zealanders find it very difficult to adjust. They do so in order that they may link New Zealand with important new markets. I doubt if we in New Zealand will ever fully understand what we owe to these people. Our embassies also provide adequate services in the areas of our traditional markets.

Our marketing opportunities are provided for us. Our small industry needs them. We are encouraged to take advantage of these opportunities. Although New Zealand exports only twenty per cent of the honey it produces, I am satisfied production can be increased and that exports can be more than doubled if those producers who wish to be involved in exporting are not obstructed by those not wishing to export and by the abuse of statutory powers wrongly vested in the associate minister of agriculture.

Any producers ability to export should be measured together with the abilities of those who support him — his bankers, his accountants, the Department of Trade and Industry, the Ministry of Foreign Affairs, the Export Guarantee Office, the Inland Revenue Department and his travel agents. Every beekeeper has all these facilities available to him as an individual.

Beekeeping is not just a way of life. It is a way of earning a living and of broadening our horizons. It should be the purpose of this association to keep it that way for all who work in the business of beekeeping.

I feel sure that this can best be achieved through appropriate legislation transferring powers now vested in the associate minister of agriculture to the minister of trade and industry.

I urge this conference give full consideration to this proposal and to make provision for its consideration by branches.

In conclusion — the year has been one of enough challenges to be interesting. It has also been another year in which I have enjoyed working with my executive and with the secretary, Mr Graham Beard and his staff. To them all I express my sincere thanks.

This is my second year as the association's president and as indicated a year ago I will not this year seek re-election. Of my current two year term as a member of our executive, one year is still to be served — I will continue to take a close interest in the affairs of our association and of the industry as a whole.

Chairman's address

Presented by Ivan J. Dickinson, chairman, NZ Honey Marketing Authority

FOR THE past eight years this address has been given to the conference by Mr Russell Poole who is at present the vice chairman of the authority. I cannot let the opportunity go by at this conference to record publicly the valuable contribution made by Mr Poole to the authority as its chairman and in the second instance the industry as a whole.

There has been a number of changes in the concept of the authority during his term some placed upon the authority by direction of government and others by changes in board policy and in both cases Russell has endeavoured to see that the return to the producer was the best possible at the time. His tenacity in seeing things through to the end and accountancy background has been a great asset in his capacity as a board member and one that will be missed on the board.

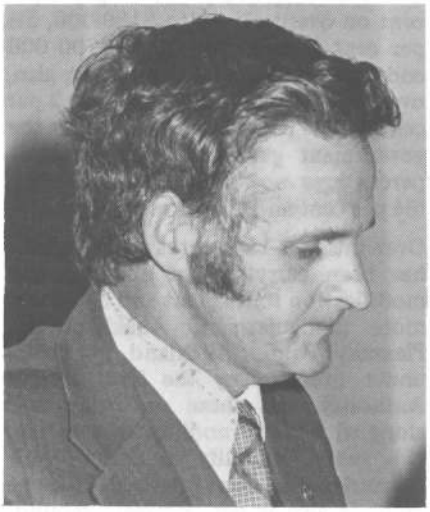
I say, "will be missed", as Russell has indicated that he will not be seeking re-election next month. If this is so I express on behalf of the board sincere thanks and appreciation of a most valuable contribution to the authority and the industry on a job well done.

We wish you well in your new venture and in thanking you Russell we ask that you convey to your wife Lorraine our grateful thanks for the forebearance that she gave for the authority's sake in allowing you time and preoccupation in authority and industry matters.

As most of you are aware by now the authority has had a very good intake and although it has not been as good as was first thought possible the 2 400 tonne is about 500 short of the record intake of 1975. However, some lines are still coming to hand on a straight purchase basis and this could close the gap further. Like the authority, most packers of honey have also had a good season and this situation is now showing its effect on the local market.

The overseas market is quiet and certainly not as active as we would like it to be. Although I must emphasise that the authority is maintaining its price. That is to sell at a price that will return net in NZ better than the base price of 81 cents. We are moving honey and as long as this situation continues the board does not see any need for any radical changes in the present policy, in spite of some overtures being made in certain quarters, which I shall mention later.

Bulk sales to the end of June 1978 amount to 458.3 tonnes, compared with 396.5 tonnes to June 1977. One of the difficulties that have a considerable effect on our prices quoted on the overseas market is the value of the U.S. dollar against the Japanese Yen. The further this gap widens so must our price move up to keep pace and maintain our net return.



Ivan Dickinson

Having this slow market overseas makes it necessary for the manager to be constantly searching and trying markets in all parts of the world and although there have been some promising markets uncovered no significant sales have been made to date. Overseas packed lines are also being marketed where and when the price meets our requirements and for some time now the manager has been looking at this whole field of packed lines in the overseas market.

In fact, one of the reasons why it is necessary for the authority to update its packing facilities is to cater for the overseas packed lines. Coupled with this market is packaging and we are in no doubt that there is room for improvement here, as was evidenced at the Apimondia Congress.

The local market is showing signs of easing in demand and there is clear evidence that there is a considerable amount of honey available to the consumer. However, the price range that is developing is of grave concern. Even taking the respective mark ups at wholesale and retail level into account honey is being traded at low prices. If the industry is to maintain its level of viability it must make every effort to maintain the prices which have been negotiated after establishment of the base price from year to year. Continued selling below this level shows a weakness that cannot be in any way justified.

One of the main issues that the conference debated last year was private exports of both packed lines and bulk honey. This matter has taken a considerable amount of board time at meetings and has been under constant review throughout the year.

The relative debate and decision of the board has already been widely circulated as was my intention when the matter first came before the board. One of the side issues arising out of this debate that should cause all producers concern is the situation that occurs when major issues are debated by a board that is split down the middle.

The board member who is then the decision maker, with all due respect to Mr Hayman, is the government nominee. Not altogether a situation that indicates a producer organisation running its own affairs. However, you as voters created that situation and it is in your own interest to rectify it at the forthcoming election.

The provision that the board made some 18 months or so ago for the export of packed lines by private packers, providing certain conditions were met has shown over the past six months more · activity and interest. Previous to this there had been only a small shipment made in this field. The authority's packed lines sales to date amount to 150 tonnes compared to last year at the same time of 124.5 tonnes, which indicates we are doing a little better already in this area.

We have had our problems with grading this year and adjustments to our normal procedures helped overcome any prolonged delays in paying advances to producers. The board regrets

any inconvenience that may have occurred and endeavours at all times to get as much finance to the producer as soon as possible.

Early in the year we had problems concerning a shipment of honey to Japan. This was in relation to the level of sucrose. The resulting negotiations between the HMA, the Ministry of Agriculture and Fisheries and the Japanese trade officials have resulted in a change in procedure which should resolve the issues involved.

However, it does require the authority to carry out and pay for certain analyses which are proving to be quite a considerable cost. The authority will be meeting with the ministry in the near future to review the present procedures in grading with a view to avoiding any delays in the coming year.

The Honey Export Regulations which cover the field of grading also have been reviewed and were to have been placed before parliament. By now, however, problems have arisen and this has been delayed. I have no doubt that the ministry will be mentioning this at this conference and I shall not elaborate further at this time.

Due to the high intake and the slow sales on the export market the authority has had to apply for a further increase in their overdraft limits. This application has over the last two months caused the board considerable concern and a recent letter from the minister of finance received at the beginning of this month put forward some proposals and conditions which the board could not agree with and immediately after the meeting on July 7, replied to the minister expressing its concern and sought changes in these proposals. Some of the proposals were far reaching and would have a serious effect on the viability of the producer and industry as a whole.

These conditions on which overdraft would only be extended were the authority agreeing to not less than $30 000 and not more than $50 000 on a NZ advertising promotion.

Coupled with this the minister of finance will be recommending to the minister of agriculture and fisheries that amending legislation be put through to enable a levy to be imposed on producers for the general promotion of honey.

The authority agreeing to a change in the base price formula. At present the price can move up 10 per cent or down 5 per cent on previous seasons net realisations. The change will mean we could move 10 per cent up or 5 per cent down on the previous season's base price if we take this season as an example, the base price for this season under this formula would have been 73c.

The authority and industry agreeing to a 5 per cent reduction in the base price for the 1978/79 season now was another condition. Normally this is not considered until all the trading and market position is known in October at the earliest.

The remaining condition was a requirement that the authority, in consultation with Trade and Industry, prepare plans for a domestic and export market promotion in general and prepare financial budgetting for the long term exercise.

As I mentioned earlier these are proposals that have far reaching effects on the industry and everyone either spends more of the producer's income or reduces it. The interest that the authority pays on Reserve Bank monies has also been reviewed., we now pay 1 per cent on overdraft up to $180 000, 5½ per cent from $180 000 to $700 000 and above $700 000 9 per cent; also, over the total overdraft, a further 2 per cent will be charged by Treasury as the government guarantee fee. So those percentages now become 2 per cent, 6½ per cent and 10 per cent.

Over the past 12 months the authority has been carrying out updating and modification to its plant and buildings, more particularly in Auckland and Pleasant Point. Auckland has been under pressure by the local Health Authority and these are being met along with plant modifications to provide more flexibility in dealing with the varieties of honey packed. Pleasant Point is also under complete rebuilding and it is hoped that work will start in the near future.

At the present time the packing plants could handle an additional 15 to 20 per cent increase in throughput but this will be insufficient if we are to extend our overseas packed line sales. This market at present shows promise, more so with the slow bulk sales and the manager has had some good inquiries from some of these markets. This also is the area in which Treasury is asking the authority to expand further. However, the extent of which they are advocating expansion will require long term planning, both in plant and container design.

Throughout the year the members of the board have endeavoured to visit and attend as many meetings of the association as possible and convey to producers uptodate information as it becomes available. In fact there would be very few branches, if any, that have not had a visit in the past 12 months.

I believe the authority has to be informative and prepared to meet the industry wherever possible on all issues and it is my intention that this be so. As many of you will be aware, the authority, in conjunction with A. Ecroyd & Son and D.F. Penrose carried out a very successful promotion of honey at Apimondia Congress in Adelaide, Australia, last October. Not only did we show our honies that are produced in NZ but the general manager and myself were able to meet and discuss with overseas buyers of honey, the world market situation.

In conclusion may I express the board's appreciation and confidence in the manager, Mr Curtis Wicht, who this season has had a difficult year in endeavouring to sell honey on a slow market and also to meet the pressures that have been created with Treasury negotiations on overdraft accommodation.

Suppliers have always received personal attention to their requirements and inquiries and this is appreciated.

Mr Wicht is also backed by a loyal staff in Auckland, Pleasant Point and Christchurch, and the board appreciates this loyalty and co-operation in carrying out the functions and operations of the authority.

Delegates and officials line up outside the Angus Inn "Bird cage" in Hastings for a conference photo.

MAF advisory report

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

Qualified apiculture advisers

The National Diploma of Apiculture is now recognised as an appropriate qualification for our existing staff. Two officers who have obtained the diploma by examination, Trevor Bryant and Vince Cook, have been promoted to apicultural advisory officers. Apiary section staff with more than 15 years' service may be redesignated as apicultural advisory officers without the need to undertake the three year diploma course. As a result of these changes, career prospects should be much wider than before. This should result in improved staff morale and consequently an improved service to the industry.

New advisory chief

The position of chief advisory officer (apiculture) at Wellington has been confirmed with the appointment of Mr Grahame Walton. Mr Walton was formerly apicultural advisory officer for the North Island and stationed at Palmerston North. A vacancy for the position of apicultural advisory officer, Palmerston North has been advertised and an appointment is pending.

Jack Varley retires

During the past year Mr Jack Varley, apiary instructor, Nelson, has retired after nine years' valuable service. Mr Andrew Matheson, apicultural advisory officer, has been appointed as Mr Varley's replacement.

American Brood Disease

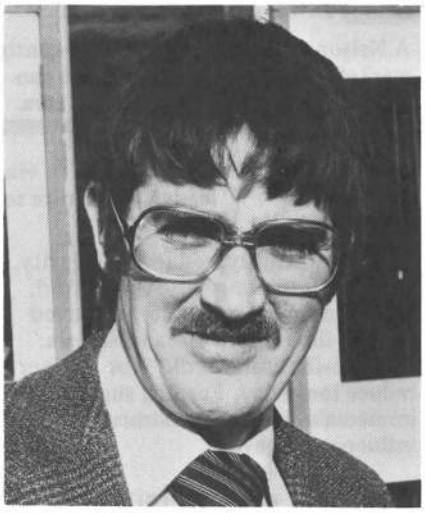
There has been an increase in the level of American Brood Disease in the last few years. During the 1977/78 season 541 apiaries (3.1 per cent) and 1 294 hives (0.6 per cent) were found to be infected with American Brood Disease and were destroyed.

The increase cannot be regarded as a rapidly growing problem as headlined in the March issue of the "New Zealand Beekeeper". The ministry's disease records clearly show that beekeepers are themselves reporting more disease, and indeed beekeepers are legally required to do so. A few years ago most disease was detected by the ministry's check inspection programme. This check inspection, and disease detection, has continued at about the same levels, however beekeepers are themselves now reporting over 80 per cent of all diseased apiaries.

Although most beekeepers are doing an excellent job in reporting and controlling American Brood Disease the ministry is concerned that a few beekeepers (and fortunately it is only a few) continue to maintain unacceptably high levels of disease throughout their enterprises.

Honey export potential

At the minister's direction, the director-general of agriculture and fisheries established a review panel to examine the opportunities in the export field for New Zealand's horticultural and apicultural products. Mr Vince Cook, apicultural advisory officer, Oamaru, compiled the beekeeping section of this report. The beekeeping industry has the potential to double in size and produce the additional honey and other exportable products to the value of about 10 million dollars.



Grahame Walton

Also at the minister's direction the ministry will over the next year examine the potential for honeydew production in the South Island.

Artificial Insemination

With the support of funds provided by your association, Mr John Smith, apiary instructor, Christchurch, studied the techniques used in artificial insemination of bees in Poland. Mr Smith has outlined the significance of his Poland visit at many well attended meetings throughout the country. A small group of beekeepers are keen to see that this method of queen rearing is developed further, and the ministry will endeavour to encourage this development by providing a technical advisory service.

Meetings and Seminars

The ministry has organised and held a number of discussion groups, seminars, field-days and courses during the past year. Considerable interest was shown in two comb honey discussion groups organised by Mr Murray Reid, Hamilton, and Mr Brian Milnes, Auckland.

Mr Trevor Bryant, apicultural advisory officer, Gore, has held some well-attended one-day seminars on various topics in recent years. A three-day course was held at the ministry's farm training institute at Flock house earlier this year and it is intended to hold further courses at Flock House and at Telford (near Balclutha) next year.

Apiary section staff have attended many National Beekeepers' Association meetings and field-days, as well as domestic bee clubs. Some staff have assisted or initiated night classes in beekeeping at technical institutes.

Publications

Staff have continued to provide material for the "New Zealand Beekeeper". A number of newsletters have also been prepared by some staff. During the past year the ministry has adopted a news sheet information series called "AgLink". The first article in this series, on American Brood Disease, has recently been released.

Overseas aid

Under New Zealand's bilateral aid programme a 10-week training visit was arranged for an agricultural extension worker from Guyana, and a four-week course was provided for a Niue Island beekeeper. Mr Vince Cook, project director of the Papua New Guinea/New Zealand development project, has made three trips to Papua New Guinea in the past year. This project is progressing very well despite a localised disease problem earlier this year.

Trees for bees

The apiary section has been active in promoting the planting of nectar and pollen sources. This promotion has been achieved through discussions with other government departments and organisations, newspaper and journal articles, and at meetings and field-days involving farmers and other interested

Beekeepers, Apiaries and hives

AS AT MAY 31, 1978, there was a total of 4092 beekeepers owning 17 273 registered apiaries and 210 978 hives.

Category	Beekeepers	Apiaries	Hives
owning 1 to 50 hives	3 737	5 352	21 136
owning 51 to 500 hives	233	3 782	50 734
owning 501 hives and over	122	8 139	139 108
All beekeepers (501)	4 092	17 273	210 978

Nearly 88 per cent of New Zealand's hives are owned by 9 per cent of the beekeepers; those with more than 50 hives each.

The total number of hives has remained fairly static in recent years. However a significant feature has been an upsurge in the number of beekeepers. There has been a 10 per cent increase in the past year. Apiary section staff report that many hobbyist bee clubs have rejuvenated memberships and this has been reflected in apiary registrations.

groups. A small field-trial is underway in Canterbury.

Moisture in honey

Trevor Bryant, apicultural advisory officer, Gore, has recently carried out a trial involving the controlled addition of moisture to "dry honey" to aid in its extraction and processing. The results of this work will be published.

The wasp problem

The ministry acknowledges that in most districts the European Wasp can be a serious problem. At the present state of our knowledge the ministry cannot do much more than it has done.

A Nelson commercial firm has recently marketed a wasp attractant that can reduce wasp levels in a localised area. This product leaves it to the purchaser to incorporate a suitable wasp attractant. Some beekeepers claim success with their own recipes. The ministry cannot recommend an attractant that is likely to attract the beneficial honeybee. I am sure your association would be one of the first to object to the ministry doing so.

The most reliable ways of controlling wasp attacks are to either eliminate all nests in the vicinity of the affected apiaries, or to shift apiaries to safer areas.

Staff training

An apiary section staff course was held in Auckland late last year. Opportunities have been given to staff to see beekeeping operations in other apiary districts. A number of apiary advisers have given individual or group tuition to other ministry staff (horticultural inspectors, advisory assistants, and livestock officers) in disease control procedures.

Four staff members attended the XXVI International Apicultural Congress in Adelaide, Australia, and three presented papers.

Wallaceville report

Highlights of a paper presented by Pat Clinch, leader, apiculture section, Wallaceville Animal Research Centre

Clover aphicide cleared

The recent arrival of the blue-green lucerne aphid in New Zealand has required the application of aphicides to flowering white clover. A field trial carried out near Ashburton showed that pirimicarb, at the rate of 125 g active ingredient per hectare, applied as a spray, in the morning, before bees were flying, was safe to honey bees.

Rape granules safe

During the 1976–77 and 1977–78 seasons, as flowering commenced, honey bees were collected from oilseed rape crops treated with disulfoton or phorate granules at sowing, in Mid and South Canterbury. Mortality was negligible, indicating that these treatments do not present a hazard to honey bees.

Carbon dioxide and bees

In some laboratory tests it is necessary to use the gas carbon dioxide (Co^2) to anaesthetise honey bees. Although it was known that this treatment had a harmful effect on worker bees, it was not known how severe the effect might be. Tests were therefore carried out to quantify the reduction in longevity that occurs after CO^2 treatment.

Compared with control bees, in most tests both single and double doses of CO^2 significantly reduced longevity. In some tests longevity was halved, and significant mortality occurred within three days of anaesthesia. Re-anaesthetisation did not further reduce longevity. Feeding sugar syrup immediately before treatment did not influence longevity.

Control of external mites

Further laboratory and field tests were carried out to control *A. externus* by feeding infested honey bees with sugar syrup containing pesticides. Fenbutatin oxide was found to be as effective as endosulfan both in the laboratory and field.

Honey and pollen contamination

Preliminary work has started at Wallaceville on an investigation to find out if any agricultural chemical application may result in the contamination of honey and pollen. To date sampling has not started, though previous samplings in other years have not revealed any traces of agricultural chemicals.

Hive variations studied

There were up to threefold differences in the honey production of colonies in this experiment. However, the differences were not directly correlated with the incidence of either *Nosema* disease or external mites *(A. externus)*, or with the longevity of worker bees.

Brood disease sampling

Following the confirmation of European brood disease in three States of Australia, a procedure was introduced by MAF apiary section and the apiculture section at Wallaceville. Samples from colonies showing any unusual brood condition were examined microscopically. Some sub-samples were sent overseas for confirmatory examination. It was considered that if European brood disease was confirmed in this country, there was a chance that it might be eradicated before it became widespread. So far the disease has not been discovered here.

Nosema disease levels

Samples of bees, collected from the flowers of crops in Mid and South Canterbury during experiments with pesticides, were examined individually at Wallaceville for *Nosema* spores. In all 25 samples collected during December 1977, less than 40 per cent of the bees were infected, and in the majority, less than 20 per cent were infected. This was in contrast to December 1976 when more than 40 per cent of bees were infected in every sample. The lower levels in 1977 probably reflected the drier weather conditions in the spring of that year.

REMITS CONSIDERED BY THE CONFERENCE

(Those not included were withdrawn)

REWAREWA HONEY INTO LINE

Remit 1

That this conference move to have the HMA payment for Rewarewa honey, which is heavily penalised because of its colour, brought more into line with the price it is realising on the retail market.

Bay of Plenty: Stanley/Mossop

In proposing this remit Mr Stanley said that Rewarewa honey can be sold through other than the HMA and result in top prices. He added that he could see no reason why the authority couldn't pay this price for good quality honey.

Speaking for the HMA Mr Wicht said that payment is paid on a grading system relative to the realisation at the end of the season.

The remit was carried 12:2

HONEY DEW EXPORTS

Remit 2

That conference supports the principle that honey-dew exports be continued on the present basis with minimum controls.

Canterbury: Jeffrey/Hanz

Mr Jeffrey said that the present system is working perfectly well. Those beekeepers who did export honey-dew were fairly careful when checking. It was true, Mr Jeffrey said, that should future shipments prove unacceptable the controls may have to be revised. However at present 'it's best to leave it alone.'

The remit was carried 12-1

PRIVATE EXPORTS CONFIRMED

Remit 3

That conference reaffirms support of the principle of exports of appropriate quantities of bulk extracted honey by exporters other than HMA but subject to HMA control and equal involvement in HMA price smoothing.

Hawkes Bay: Ian Berry/Marshall

In proposing this remit, Mr Berry said that the present situation of HMA control would continue until all export channels were opened. He said an ideal situation would be of some exporting by producers with HMA control. This would ensure that the prices were the best available and also prevent the total takeover by private exporters.

One area of particular concern to Mr Berry was that of problem honeys. The HMA are not obliged to pay an economic return for such honeys. However, Mr Berry cited the case of manuka honey which at one time brought prices so low that beekeepers were forced out of business. Now manuka honey was bringing in better returns than clover honey. Mr Berry said it was in the best interests of HMA to reduce the intake of honey and to allow problem honeys to be exported.

Mr Bartrum, speaking against the remit, said that if the government allowed this to happen there would be chaos in the industry. It would mean an extra 2 500 tonnes of honey going onto the local market.

It was vital, said Mr Bartrum, that there should be an organised method of marketing if the industry was to progress.

Another delegate suggested it was an individual responsibility of all beekeepers to export privately to ensure that the HMA was doing its job properly. However, Mr Jansen pointed out that there were dangers in exporting as a private individual. He suggested working as a co-operative in marketing, saying it was important that the HMA keep control and receive income from private exporters to cover administration costs.

Mr Windslade said that according to the associate minister of agriculture and fisheries this could not be done.

Mr Poole, speaking for the authority, said that one of the hardest things to do in the world was set a price and then stick to it.

The remit was carried 4213:2142

PRIVATE EXPORTS VETOED

Remit 4

This conference is opposed to private exports of bulk honey and is of the opinion that previous remits to allow private exports of bulk honey should be rescinded.

Waikato: Mitchell/Broadley

This remit caused considerable concern and debate because in effect it immediately rescinded the previous remit.

Various amendments were proposed including:
This conference is opposed to private exports of bulk honey not under the control of the HMA.

Mr Dudley Lorimer said that the amendment indicated that conference was opposed to export unless under the control of the HMA. The Waikato remit was, he said, for no export of bulk honey at all whether under the control of the HMA or not.

Because defeating the remit would imply that unrestricted bulk exports should be allowed, there was a great reluctance to put the remit to the vote without an amendment. Delegates who suggested that it should just be withdrawn were advised that this was not possible once it has been seconded and opened for debate.

Eventually the remit was left to lie on the table until the second day of conference from whence it was uplifted on the request of vice-president Mike Stuckey. Mr Stuckey then amended the remit in such a way that if the amended remit was defeated, it would not prejudice the decision made in remit 3.

The final result was that the amendment was accepted on a vote of 10:3. The amendment then became the motion which was lost 2156:1914

MAXIMISING EXPORTS

Remit 5

That conference urges the Honey Marketing Authority to use its best endeavours to maximise exports of New Zealand honey.

Hawkes Bay: Marshall/Berry

Mr Berry proposed this remit stating that the more honey exported the better off the industry would be.

Mr Bartrum said that the authority should sell on the best market possible whether locally or overseas.

This seemed to be the general feeling of the conference and the remit was passed 12:2

EXPORT PROMOTION

Remit 6

That this conference request the NBA to actively assist and promote the export of honey with particular regard to packed lines. Additionally to provide relevant information re-labelling, weights, levies, etc. concerning countries that promise potential markets for New Zealand honey.

R.L. Jansen/Mitchell

Mr Jansen posed the question to the conference of what the NBA was actually doing for the industry.

Mr Berry then proposed an amendment that:

This conference request the NBA to actively assist and promote the export of honey with particular regard to packed lines.

Mr Eckroyd opposed this amendment on the grounds that if the exporter couldn't do his own homework and promotion then it was "a pretty poor show."

The amendment was lost.

The remit was lost.

HMA EXPORT CONTROL

Remit 7

That the Honey Marketing Authority only permit exports by those private exporters who can substantiate nett returns greater than the nett return obtainable by the Honey Marketing Authority for similar lines of honey.

West Coast: Braid/Glasson
The wording of this remit caused considerable concern because of the use of "nett returns". Because of this the remit was amended to read:

That in the event of private exports being allowed, the Honey Marketing Authority only permit exports by those private exporters who can substantiate selling prices greater than the selling prices obtainable by the Honey Marketing Authority for similar lines of honey.

Mr Braid said that the remit was presented to show total support for the HMA which was "in grave danger of being eroded."

The remit was lost 10:3

REFERENDUM ON MARKETING POLICY

Remit 8

That before any major changes in the marketing policy of the HMA are made (i.e. private exports of honey) a referendum of all hive levy payers be held to gauge the true feeling of the industry.

S.M. Booth/Marshall
Mr Robinson said that people who are interested in this area should come to conference.

An amendment was proposed that:

Before any major changes in the marketing policy of the HMA are made (i.e. private exports of bulk honey) a referendum of all hive levy payers be held to gauge the true feelings of the industry.

The amendment was later lost as it was felt by many delegates that it added little to the original remit.

The remit was lost 13:1

EXTRACTED HONEY EXPORTS

Remit 9

That conference reaffirms support of the principle of exports of appropriate quantities of retail packs of extracted honey by exporters other then the Honey Marketing Authority but subject to Honey Marketing Authority control and equal involvement in HMA price smoothing.

Hawkes Bay: Marshall/Ian Berry
Mr Berry said that what was needed was a system of equal involvement. When money was put into the rural account private exporters should contribute the same amount as suppliers to the authority. If things should change the other way the money should come out in the same proportions.

Mr Lyttle proposed an mendment that:

Conference reaffirms support of the principle of exports of appropriate quantities of retail packs of extracted honey by exporters other than the Honey Marketing Authority but subject to Honey Marketing Authority control and with a separate equalisation scheme to be run for private exporters.

Mr Robinson said that delegates were asking for the best of both worlds. Mr Bartrum said he did not consider it was fair that new people should come into the scheme and take the funds built up.

However many of the other delegates did not think this was a valid point with one delegate pointing out that he would never receive all the money he had put into the scheme back but it was still important because it was helping the industry.

The amendment was lost 11:3

The original remit was carried on a poll vote 3120:1188

AUTHORITY ATTACKED

Remit 10

That conference views with serious concern the apparent inability of the Authority to justify its policy of retail honey packing for the following reasons:

1) The Authority admitted at the 1977 Conference it was unable to fully recover its packaging costs.

2) Being a statutory board, no provision can be made for a profit margin on which private enterprise is dependant.

3) Its current export of retail packs based on the above criteria is having the effect of underpricing the product on the overseas market. In turn, this sets price precedents which private packers will find extremely difficult to compete with.

R.L. Jansen/Cropp
In proposing this remit Mr Jansen said that on the Singapore market the New Zealand packs of honey are selling some 50 per cent cheaper than similar American packs.

Mr Wicht disputed these figures and was backed up by Mr Poole who added that the authority had applied to the price tribunal for a price on all packs.

Mr Stuckey said that as New Zealand only supplies 1 per cent of the world's honey he couldn't see why Mr Jansen wasn't trying for a new area to sell in. The remit was not constructive he said.

The remit was lost.

PRIVATE EXPORT ADMINISTRATION

Remit 11

That this conference request that the administration of private exports be removed from the jurisduction of the HMA and be placed in the hands of an impartial body, be it industry orientated or a suitable government agency.

R.L. Jansen/Stuckey (pro-forma)
Mr Jansen said he was proposing this remit as there "is a need for reason in the industry."

Mr Stuckey, in seconding the remit, said it has merit in one quarter. There is, he said, a movement by suppliers to the authority to have a weighted voting system. If such a system were to come in then everyone would have a vote on that and the suppliers to the authority would then have extra or all votes on the authority. At this stage the system would be very close to a co-operative.

Mr Stuckey said that apart from this point he felt the remit was a bit premature but might be worth looking at in the future.

It was also pointed out that it would be better to wait and see how the private export system works. If, in fact, the

export market proves highly competitive then the board could once again be on top.

The remit was lost 13:1

INFORMATION ON WASPS

Remit 12

That conference press the Ministry of Agriculture and Fisheries to publish information regarding their research into wasp control.

Hawkes Bay: Marshall/Bradley

Mr Marshall said that at present there is no information available as to what the ministry has found out in their research.

Mr Walton replied that the ministry has published a fairly detailed article in the NZ Beekeeper just over two years ago.

The remit was carried 12:2

COMPENSATION ON BACILLUS LARVAE

Remit 13

That government be urged to provide compensation for all hives affected by Bacillus Larvae subject to being certified by the District Apiary Instructor as being diseased.

Otago: Richards/Jeffrey

Mr Jansen asked who would be responsible for certifying whether or not a hive was diseased. He said he was opposed to the remit as there is "no greater incentive to controlling disease than having to carry a loss."

An amendment was then proposed by Mr Mitchell to the effect:

That the government be urged to provide compensation for all hives affected by Bacillus Larvae subject to consideration of adopting the Australian system of inspection and compensation as for example in New South Wales.

This amendment was withdrawn following Mr Walton's explanation of ministry investigation into the Australian system. These have shown that to operate such a method in New Zealand would cost about 18c/hive plus administration costs. This would total a hive levy of approximately 21/22c/hive.

The original remit was later lost 10:3

BREEDING STATION

Remit 15

That the MAF give full support to the Queen Bee Artificial Insemination programme with a view to the eventual establishment of a breeding station.

Southland: Booth/Clissold

Speaking against the remit Mr Windslade said he didn't regard the programme as being particularly wonderful. "The idea was developed some years ago and unfortunately they started a bit too quickly. I feel that probably support would be more practical if a Rural Bank loan was available to get them through the establishment period."

Mr Walton said that during the last year the ministry has given full support to the programme. In fact he voiced fears that they may have over supported it. There is now a nucleus of beekeepers able to conduct the programme but it is felt that many beekeepers are expecting too much of it. Several of the delegates voiced the view that the programme was a waste both of time and money.

The remit was carried 8:6

APPEALS ON APPOINTMENTS

Remit 16

That beekeepers directly affected by appointments within the apiary section of the MAF should be given the opportunity of expressing their ideas on the appointment to the State Services Commission, or to the appeal comissioners, should the appointment go to appeal.

Northland: Gavin/Haines

Mr Gavin said that his branch felt that beekeepers need the advice of other beekeepers. At present, he said, advisory officers are coming straight from university to us.

Mr Bartrum said the industry needed a say in the employment of staff in the apiary section. He said that employing degree instructors alone was a retrograde step as without experience they were of far less use than an experienced man.

Following advice from Mr Hayman, the government representative on the HMA, the conference was told that such action as recommended by the remit was not really within the power of the conference.

The remit was lost 1899:1681

SOUTH ISLAND SEMINARS

Remit 17

That conference ask the ministry to hold a two day seminar at Timaru in the 1978-79 year.

Otago: Heineman/Richards

Mr Heineman said that this remit was in no way a criticism of the local apiary officers. It was, he said, simply felt that a need existed for a meeting to discuss new ideas and catch up on techniques. For this purpose the Otago branch felt that Timaru would be the perfect venue.

Mr Walton replied that MAF was prepared to run such courses if a need was apparent. He said that he was sure most of the apiary officers in the South Island would agree that such a situation hasn't been noticed to date.

The remit was amended to read:

That conference ask the ministry to hold another seminar at the venue of the next conference, Timaru, in the 1978-79 year.

The remit was carried unanimously.

TREES FOR BEES

Remit 18

That the association seek government co-operation in the growing of "Trees for Bees".

Northland: Gavin/Jeffrey

In proposing this remit Mr Gavin said that a stage has been reached where forestry department reaction to the campaign is very favourable.

Seconding the remit Mr Jeffrey said the need for trees for bees is growing. "The quicker we can reverse the trend of anything higher than three feet being eliminated the better," he said.

The remit was carried unanimously.

DSIR INVESTIGATES WASPS

Remit 19

That the appropriate branch of the DSIR be requested to determine by test the probability of the German wasp (Vespa Germanica) being involved in the distribution of Bacillus Larvae spores.

Northland: Gibbons/Morris
In proposing this remit Mr Gibbons said that many beekeepers in Northland have noticed that high wasp population co-incides with their worst years for disease.

The remit was carried unanimously.

MAF REPRIMANDED

Remit 20

That this conference request reasons why the apicultural division of MAF saw fit not to implement Notice No. 4 on the Order Paper of the 1977 Annual Conference which was passed unanimously.

Far North: Haines/Gavin
Speaking in reply to the remit Mr Walton, MAF chief advisory officer, said that the department had informed the association's executive secretary that the suggestion would be discussed at the next reviewal of the Apiary Act.

Mr Steve Lyttle asked whether the ministry would then enforce the decision.

Mr Walton replied to this that all the staff of the apiculture section are expected to follow the law.

The remit was carried 10:3

IMPORTATION CAUSES PROBLEMS

Remit 21

That this conference reaffirms its support of a total ban on the importation of queens and semen.

Far North: Haines/Jeffrey
In seconding this remit Mr Jeffrey said it seemed logical to be careful about what is imported until more information is available.

Mr Ward, speaking against the remit, said that having passed approval for work in Tonga at Tonga in 1976 this remit became simply a vote of no confidence in the MAF set-up at Wallaceville.

A lengthy debate followed in which everything from the inclusion of propolos, pollen and honey to the exclusion of semen was proposed and rejected.

The final amended remit read:

That this conference reaffirms its support of a total ban on the importation of queens, semen, pollen and honey (with the exception of queens from Tonga after satisfactory safeguards have been met).

The amended remit was carried on a poll vote of 3009:1443

APIARY INSTRUCTORS NEEDED

Remit 22

That conference draw the attention of the minister of agriculture and fisheries to the necessity of appointing qualified beekeepers as apiary instructors.

Canterbury: Jeffrey/Hanz
In proposing this remit Mr Jeffrey said that in many fields it was not so much the men with degrees as the men with experience who are of value. However he did say that there is a place for both types of men in the beekeeping industry.

The remit was amended to read:

That conference draw the attention of the minister of agriculture and fisheries to the necessity of appointing persons who are experienced in beekeeping as apiary instructors.

This remit was then carried unanimously.

FOOD HYGIENE REGULATIONS

Remit 23

That this conference recommends that the executive of the NBA work with the health authorities to produce a set of workable amendments to the Food Hygiene Regulations which would be applicable specifically to the Honey Industry.

Bay of Plenty: Mossop/Broadley
In proposing this remit Mr Mossop said it was time the industry got a ruling from somewhere as to just what is specifically necessary to the bee industry.

Speaking from the chair Mr Percy Berry said that the executive would be quite in favour of such a proposal.

Mr Cloake said that the health regulations apply to everybody in the same way. He added that 'there is not a great deal of room for misinterpretations.'

Mr Marshall said in his view the best policy would be to let sleeping dogs lie or the industry might find itself in a worse state than it is now.

Mr Mossop, in his right of reply, said it boiled down to a question of whether to let sleeping dogs lie or to shake them by the tail and see what happens.

The remit was lost 9:4

OPOSSUMS ERADICATED

Remit 25

That this conference encourage the Forest Service to continue its efforts to eradicate browsing animals from protection forests.

West Coast: Braid/Glasson
Mr Braid said that the two main honey species of the West Coast are being affected by the amount of food taken by the opposum.

Mr Mitchell said he was opposed to the remit because the wording "browsing animals" was not selective enough. He proposed an amendment to the effect:

That this conference encourage the Forest Service to continue its efforts to eradicate opossums from indigineous forests.

Mr Bartrum supported the amendment saying it was ludicrous that while the country is getting tens of thousands of dollars from deer overseas the conference was considering continuation of mass killing.

Mr Peter Berry disagreed with the amendment saying it was vital that New Zealand gets rid of every deer and opposum.

The amendment was carried 9:3 and became the motion which was then carried unanimously.

MORE WASP CONTROL

Remit 26

That this conference approach the national Pest Destruction Board with a view to enlisting their aid

in the destruction of wasp nests encountered in the course of their normal duties.

Bay of Plenty: Stanley/Mossop
Mr Stanley said that the Bay of Plenty branch felt it was about time someone took a definite interest in taking care of wasp nests. "After all wasps are not only a beekeepers problem."

The remit was carried unanimously.

BEEHIVES AS LOAN SECURITY

Remit 28

This conference request the NBA executive to approach the Rural Bank and Finance Corporation with a view to having beehives regarded as security for borrowing.

Nelson: Cropp/White
In proposing this remit Mr Cropp said if beehives were classified as security beekeepers would then be able to arrange loans.

Mr Cloake replied that his business had had such loans, with hives as security, so such a system is already operating. He then warned conference against 'rocking the boat too much' in case it tipped the scales away from such a practice becoming standard.

The remit was carried 12:0

"BEEKEEPER" CRITICISED

Remit 29

This conference would like to see the NZ Beekeeper journal printed with: a) more reading for beekeepers b) articles printed in full.

Nelson: Cropp/White
Mr Cropp said he felt that the "Beekeeper" has not had as much material in it recently as it did under the previous editor.

The editor told the meeting that it was not always easy editing a magazine for an industry which was divided on many issues and was also made up of commercial and hobbyist beekeepers.

He said that of the 1 100 magazines currently on subscription, only 312 went to hive levy payers, of which only 150 were commercial beekeepers. One hundred magazines went to paid subscribers overseas and 600 went to local hobbyists (fewer than 50 hives).

The editor said it was his principal function to "edit" and that there were no funds available for him to travel to get stories. This meant that the journal which resulted was very much what he could arrange in co-operation with regular writers, MAF advisers and so on.

Delegates, he said should tell him what stories they specifically wanted that they were not getting at the moment, and they should also say what they wanted taken out of the magazine if room was to be found for these new articles.

Delegates were, however, unclear on this point and did not give any specific guidance as to what they wanted in the way of "commercial articles". One delegate did suggest, however, that the extra space could be found by cutting out all advertising.

Mr Bartrum added that in his view more articles for commercial beekeepers should be printed.

It was then pointed out by Mr Robinson that the editor of the journal has the job of "editing" the magazine and that if anyone wanted more coverage they should send the material in.

An amendment was proposed that:

This conference would like to see the NZ Beekeeper journal printed with: a) more reading for commercial beekeepers b) articles printed in full.

The amendment was carried 8:6 and became the motion.

The motion was carried 11:2

900 GRAM CONTAINER OUT

Remit 30

That the industry phase out the 900 gram container and replace with 1kg.

Otago: Heineman/Morris
Although it was suggested that such a change would simplify matters this appeared not to be the case. The 900 gram container is used for many other products and should a change occur the 1kg container would be for the specific use of beekeepers.

This could, according to Percy Berry, involve around a $20 000 outlay.

The remit was lost 9:3

REPELLENTS IN SPRAYS

Remit 31

That urgent attention be given to the development of bee repellents in sprays used in grassed down orchards.

Canterbury: Jeffrey/Hanz
Mr Jeffrey said that although there isn't much spray damage there is some. Mr Robinson while agreeing with Mr Jeffrey still amended the motion to read:

That urgent attention be given by the Ministry of Agriculture and Fisheries through the research department to the development and implications of bee repellent in sprays.

The amendment was carried unanimously.

VOTING AND RULES

Remit 32

That the Rules be altered to allow members attending Conference to cast their own votes.

Heineman/Jansen
This remit resulted in a protracted debate as to voting powers at conference, with the secretary and some delegates being of the view that delegates could already withhold their vote until conference, so long as they did not make a vote at the branch remit meeting and notified their branch delegates of their intention in advance.

Nevertheless, it was agreed that the remit as it stood did not express precisely the wish of the conference. As a result, an amendement was moved by Bray/Broadley as follows:

That it is the opinion of this conference that the rules should be altered to provide for members attending the conference to be free to cast their votes through their branch delegates.

This amendment was carried and became the motion. The amended motion was then carried 12:2.

However, because the rules of the association cannot be changed other than through a properly notified constitutional change made at the annual meeting, the remit is being referred to the association's solicitor to get a ruling as to the precise powers of delegates and members at the conference.

MONOPOLIZING THE INDUSTRY

Remit 34

That appropriate steps be taken to prohibit any one person being on the Board of the Honey Marketing Authority and the Executive of the National Beekeepers Association at the same time.

Note: Stops people monopolizing the industry.

South Canterbury: Lyttle/Bartrum
This remit won little favour with delegates. It was considered that there were few enough people with the time and skills to devote to industry office, that preventing them from holding joint office would be counter-productive. Some delegates also argued that the more closely the two organisations worked together, the better it would be for everyone.
The remit was defeated 11:2

BLOCK VOTING ARGUED

Remit 35

That the Rules of this Association dealing with the method of voting for National Executive be amended to state "That the voter may vote for any number of candidates up to the number of vacancies to be filled.

South Canterbury: Bartrum/Heineman
Despite the protestations of those who argued that the eight or ten biggest beekeepers in the country could virtually block vote in their own nominee if the remit was adopted in the rules, it was nevertheless carried 9:5.

POSTAL REFERENDA

Remit 36

That this Conference direct the Executive to organise a postal referendum of all members to determine whether they are satisfied with the present undemocratic voting system.

Note: It has been felt by many members attending Conference that the voice of the industry is not being heard. The voice of the few who hold the most votes get the decisions at branch meetings where remits are considered.

Heineman/Dickinson (pro-forma)
This remit won virtually no support from the conference. It was decisively defeated.

VOTES FOR TONNES SUPPLIED

Remit 37

That voting for Honey Marketing Authority members on the Authority revert to a similar basis as previously, with votes on hive holdings plus one vote for every tonne of honey supplied to the Authority.

Lyttle/Bartrum (pro-forma)
This remit won little support from the delegates and was decisively defeated after little debate.

NOTICES OF MOTION

LACK OF RESERVE BANK FINANCE

Remit 1

That this conference express its concern at the lack of Reserve Bank finance on reasonable terms to meet the HMA's committment to the industry.

Robinson/Mitchell
This topic arose out of topics raised by the chairman of the Honey Marketing Authority, Ivan Dickinson, in his address to the conference. It received the unanimous support of the conference.

PERMISSION TO SPRAY

Remit 2

That conference request that an amendment be made to the Apiaries Act that 'no person shall spray or dust any flowering plant which is attractive to bees, with any substance which is toxic to bees unless permission is obtained from the MAF.

Note: Present regulations do not in effect cover spray drift onto ground flora beneath fruit trees etc. Spraying sometimes occurs without any attempt to limit bee mortality.

Jeffrey/Heineman
Carried 14:0 after little debate.

FLOWERING SHRUBS ON ROADSIDES

Remit 3

That conference request that the Commission for the Environment be approached to investigate the feasibility of allowing farmers to plant roadsides with suitable flowering shrubs and small trees. The local counties can be encouraged through the commission to allow this departure from present by-laws. Permits are invisaged to ensure suitability.

Benefits which would arise are:

- *Protection of pastures from drying winds.*
- *Saving in fencing costs for shelter belts.*
- *Enhancing the aesthetic value of our roadlines.*
- *Provision of pollen and nectar sources for bees.*
- *Provision of nesting sites for many birds.*

Jeffrey/Heineman
Carried 12:2 after little debate.

GOVERNMENT SUGGESTION DEPLORED

Remit 4

That this conference deplores the action of the government in suggesting a lowering of the Base Price for the 1978/79 season without regard to the full year's trading by the authority.

Bartrum/Hanz
This notice of motion had the overwhelming support of the conference. It was carried 14:0 after little debate.

1979 CONFERENCE

Remit 5

That the 1979 conference be held in Oamaru.

Winslade/Robinson
Carried with only one dissent (and that in jest).

Wax moths are no joke

Whether you call them wax moths, wax "worms", or some other name, the insects that live in and destroy honey bee combs are a continual problem. The moths probably destroy more valuable comb than is lost to Bacillus larvae, yet some beekeepers who think it is a crime to burn BL-infected colonies often allow thousands of their combs to be ruined by wax moth larvae every year. From this month onward through the summer, beekeepers should plan to keep wax moth larvae under control as well as possible. This means fumigating stored combs routinely at about monthly intervals. You must consider that any combs and equipment removed from hives in the field are probably infested with the eggs or larvae of wax moths. For fumigating a few supers of combs, paradichlorobenzene (PDB) is probably the easiest to obtain and use. Place about 3 ounces or 6 tablespoonfuls on a paper within each tightly closed stack of not more than five deep supers containing empty combs. Add more PDB as the crystals disappear, so that some is present at all times. Air the treated combs for a day or two before placing them on colonies of bees.

Ethylene dibromide (EDB) is more suitable than PDB for fumigating large numbers of combs. Like PDB, it cannot be used to fumigate comb honey, but it can be used for honey destined to be extracted or to be used for feeding bees. Fumigate out of doors or in a well-ventilated room unused by people. Place 1 tablespoonful of EDB on an absorbent pad in each closed stack of up to eight deep supers; use 2 tablespoonfuls if the temperature is below 60° F. Mixtures of chemicals containing EDB should not be used for fumigating combs. They are not approved for such use, and the other chemicals in the mixture, such as carbon tetrachloride, could leave unwanted residues in the combs or could be hazardous to use.

There are two ways to kill wax moths in comb honey. You may fumigate it with carbon dioxide gas or freeze it. To use the gas effectively, you must maintain a 98 per cent concentration for four hours while keeping the temperature at 100° F. and the relative humidity at 50 per cent. Cold temperatures will kill all stages of the wax moth, depending on the temperature and the period of exposure. At 20° F. it takes 4-1/2 hours to do the job; at 5° F., a two-hour exposure is enough to destroy an infestation.

In the book *Foxfire 2*, edited by Eliot Wigginton, the problems created by wax moths in the mountains of the Southeastern United States are discussed. In those areas, where bees are still kept in log gums (portions of hollow trees), people believe that the moths spread from one hive to another and kill the bees. Beekeepers in the mountains have also reported that weak colonies are often targets of moth infestations. In an attempt to control the moth larvae, beekeepers often kill both bees and moths with boiling water or burning sulfur.

A different view of adult wax moth behaviour was recently published by R.A. Nielsen and D. Brister *(Annals of the Entomological Society of America*, January, 1977). They found that female moths flew to bee hives from nearby trees at dusk or up to three hours afterwards. Some colonies, especially strong ones, were more attractive to the moths than others. As many as seven to 12 moths went to these colonies every night, while moths rarely visited many other colonies. When an attractive colony was moved as far as 300 meters, the moths continued to visit it. The female moths usually left the hives just before dawn, after laying their eggs inside the colony.

The bees are generally not effective at catching and killing adult wax moths. However, for reasons not understood, bees will quickly kill moths that are inside the hive when the colony is disturbed by a sharp tap on the hive.

Wax moth larvae infesting strong colonies of bees often spin their cocoons in the holes in the frame end bars where wires pass through. The larvae enlarges the hole to give itself more room. Female moths lay eggs most often inside the hives, but may also place eggs in the cracks between hive bodies and beneath the hive lids. After hatching from the eggs, the larvae enter the hive.

Elbert R. Jaycox, Extension Beekeeping Specialist, 107b Horticulture Field Lab, University of Illinois, Urbana, Illinois 61801

OTHER PUBLICATIONS

INTERNATIONAL BEE RESEARCH ASSOCIATION regularly publishes new information on bees, beekeeping and hive products, for beekeepers and scientists all over the world. IBRA Representative for New Zealand: G.M. Walton, Advisory Services Division, Ministry of Agriculture and Fisheries, P.O. Box 2298, Wellington. Catalogues of publications and details of journals and membership $0.55; specimen copy of journals: **Bee World** $1.10, **Journal of Apicultural Research** $1.10, **Apicultural Abstracts** $1.55. INTERNATIONAL BEE RESEARCH ASSOCIATION, Hill House, Gerrards Cross, Bucks. SL9 ONR, England.

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CORRESPONDENTS

THANKS, VOTERS

Dear Sir,

I would like to take this opportunity to thank those who gave me their support during the recent N.B.A. elections.

To me it was a positive indication that the beekeepers of New Zealand wish to keep the two branches of our industry as separate entities.

Looking forward to representing you all on executive.

Yours,
Paul Marshall,
Napier

MANUKA PROBLEMS

Dear Sir,

Mr Trevor King may be interested in my extraction method for manuka honey.

I collect the combs in the morning and extract in the afternoon, while it is still warm from the hive.

The combs are scraped with a stainless steel trowel bent to a suitable radius at the top. All the honey and wax are removed right down to the foundation.

The resulting "porridge" is placed in two filter bags made of nylon mesh (whitebait netting) inside a very fast extractor. My extractor rotates a perforated steel barrel 30 cm. in diameter at 8 revs per second.

This brutal treatment liquifies the manuka honey which flows through a stocking filter into a plastic dustbin where it soon sets into a jelly.

The combs are a bit rough after this but it is surprising what a good repair job the bees can do.

The process is slow and I can extract only about 10 boxes in an afternoon.

It is naturally better to extract on a hot day.

Yours,
George Nichols,
Hokianga

COTTON NOT FIRST

Dear Sir,

An article in your last issue links William Charles Cotton with the first bees in New Zealand. Actually, he was fourth or fifth in the line.

New Zealand's first beekeeper was Mary Anna Bumby, as stated by Isaac Hopkins. Her photo is in the February 1971 issue of "The New Zealand Beekeeper".

The second importation was by James Busby in 1840, the third by Lady Hobson in 1840, and the fourth was sent by Mrs Allom to Captain Wakefield and arrived in May 1842. Cotton with his bees arrived on May 29, 1842.

Yours,
Chris Dawson,
Hon. Librarian N.B.A.

Sorry for any confusion. By associating him with the first bees in New Zealand, we only meant in a general sense. No-one could argue that he was not among the front-runners.

CROSS-BREEDING

Dear Sir,

I think that you and your artist made a good job of the article on my introduction to the perils of the north. I have since had a couple of suggestions.

Mr Goddard of Blenheim suggested crossing bees with termites to get 30 000 eggs per day; but I guess they would only gather sawdust.

Another suggestion came from Peter Pearson, Titoki. It was to cross bees with mosquitos. I would imagine the idea would be that they would gather blood and I could start my own blood bank. I suppose they would store the different groups separately.

Yours,
Don Gibbons,
Whangarei

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SMALL FARMERS ASSOCIATION

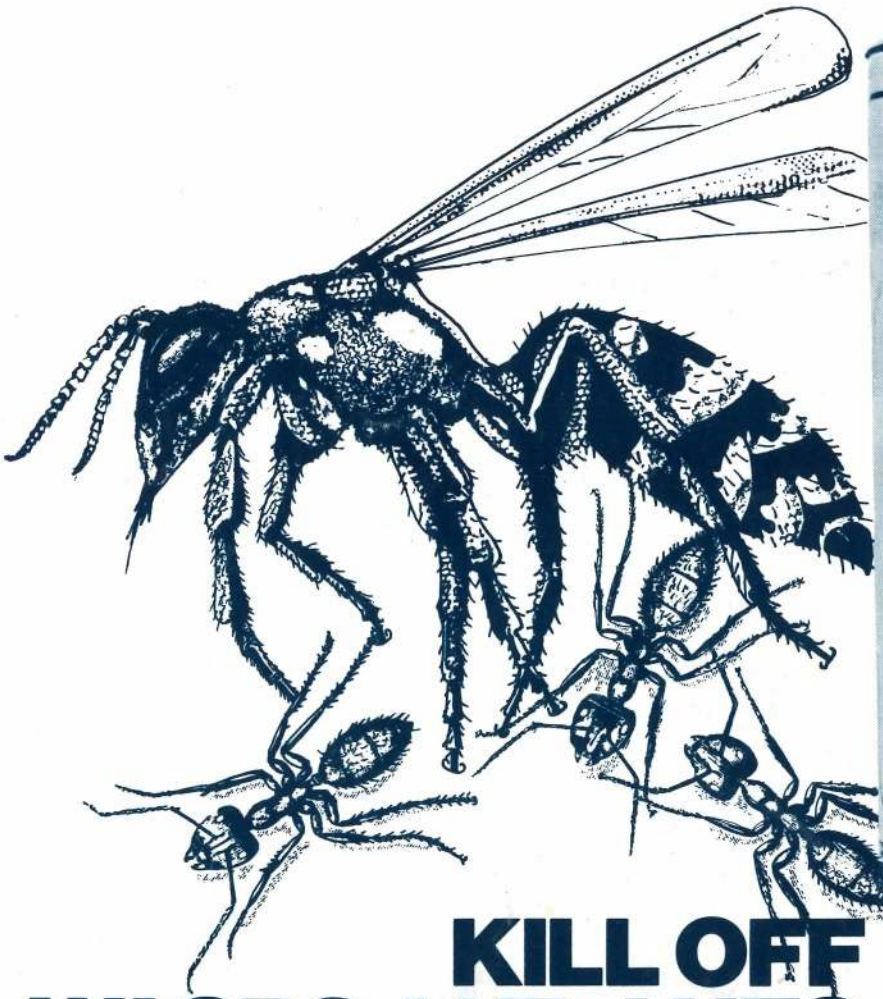
On 3 June last the first annual general meeting of the New Zealand Association of Small Farmers, was held in Palmerston North. A constitution was adopted by the members who had come from all parts of New Zealand.

The association was formed in the belief that many families living in rural areas on small holdings wanted recognition of and representation for their special needs. Small farmers, by the nature and diversity of their operations, felt that to substantially improve their holdings more technical and practical support was required.

Various small groups throughout New Zealand have already been formed to look after local needs. The National Association is committed to assisting individual small farmers and groups with technical and practical information. A 'watchdog' on impending legislation will be undertaken with recommendations being made on behalf of the interests of small landholders. There are 27 000 small holdings between 1 and 12 hectares of which 20 000 have resident families contributing to the economic and cultural growth of rural communities.

If you occupy or intend to occupy a small landholding and would like further information about the association, write to:

The Secretary,
New Zealand Association of Small Farmers,
P.O. Box 2081,
Palmerston North.



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