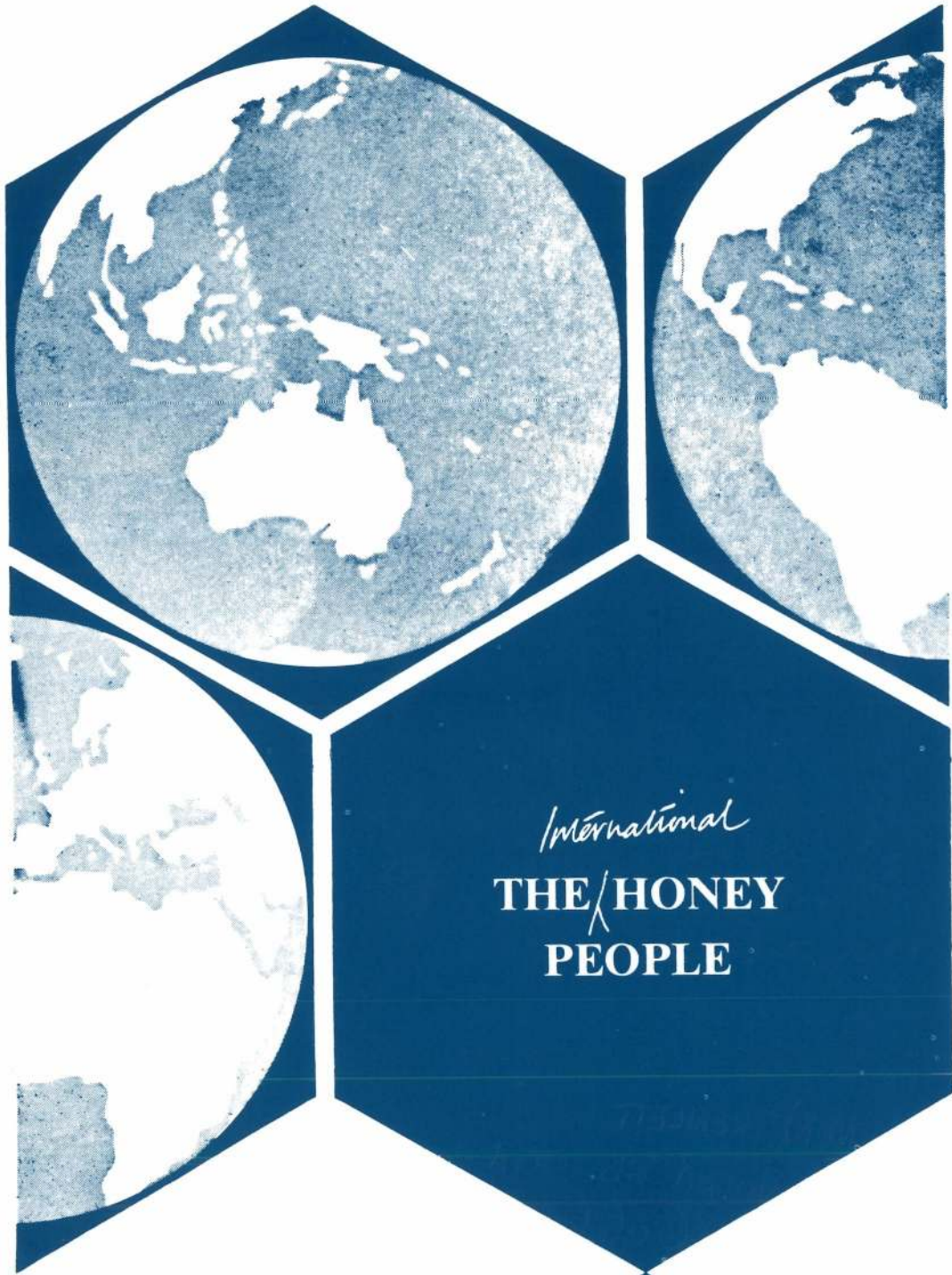


THE NEW ZEALAND
beekeeper



JUNE 1978





International
THE HONEY
PEOPLE



KIMPTON BROTHERS LIMITED
Honey and beeswax specialists



THE NEW ZEALAND BEEKEEPER

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Time for tough decisions

IT WOULD be tempting for critics of the HMA to conclude that the authority was passing the buck, by referring the question of bulk private honey exports back to the industry.

In our view, the move is a wise one. A sudden move into bulk private exports could result in the rapid collapse of the HMA and the current honey pricing system.

In the absence of a well-developed private marketing mechanism, the result would be industry chaos.

If, however, the industry wishes to move into private enterprise marketing, the discussion paper distributed to HMA suppliers and sum-

marised in this issue will provide a sound basis for industry deliberations.

If the industry wants to see the end of centralised marketing, it would be wise to allow current HMA suppliers the time to set up the strong marketing groups which would be necessary if the new system is not to be subject to violent fluctuations.

There is a certain irony that beekeepers and pipfruit producers should be considering doing away with compulsory marketing co-operatives at a time when many other primary producers are looking toward co-operatives as a solution to the vagaries of private enterprise.

Let's hope there is a middle road.

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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. Specified 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 deductions 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 wish to may not wish to join the association, will pay an annual subscription of \$7.50 which includes the cost of a subscription to the NZ Beekeeper.



THE B.L. SCOURGE

Dear Sir,

In a recent publication of the "Bee-keeper", I see the incidence of B.L. is on the increase again.

With a remit now being formulated by our South Western branch and hopefully to be put before conference this year, it is to be hoped that this all important matter will receive the attention it deserves.

Perhaps the N.B.A. and the apiary section of M.A.F. will be able to get together and come up with something helpful.

Perhaps a proportion of the hive's value when it has to be destroyed. This would help in the case of a genuine loss. Stop anyone from thoughts of farming the system, and also tend towards much more accurate records being kept. This problem has been for too long, accepted as part of the beekeepers lot.

Over the years the apiary section, together with the help of the all-important part-time inspection service have done the best they can. But the end result is what matters, and this leads one to think that perhaps much of our trouble comes not from the hobbyists, whose hives are inspected each year, but from the potentially far more dangerous so-called commercial man whose interest has gone and whose hives are in many cases badly neglected.

For just on 20 years as a part-time inspector, working over a large area, only one diseased apiary was ever found and I have yet to find an infected wild hive. But when disease raises its ugly head, these two sources seem to be the first to be blamed.

Perhaps if we were to look closer to home, the buying in of other outfits; the lack of any real safeguards as to the absence of disease either in the hives or spare supers; we could really start to get some results.

I cannot imagine any other branches of the livestock industry where the attitude of "buyer beware" seems to be good enough.

No, I think that if the apiary service, thin as they are on the ground together with other part-time helpers, were to have a real blitz on some of the run down outfits that will financi-

ally want to sell out and so spread their troubles to clean areas, we could really start to get somewhere.

I have a lot of sympathy for the young man who with much enthusiasm, and not too much spare cash can find much of his hopes and plans going up in flames.

The loss of a hive today, together with its potential crop, is a very serious matter.

Also, those of us who carry out our spring inspection in a conscientious manner, together with a quick check at harvest time, know just how expensive in time and travelling costs it can be. There is also the tremendous build-up of urgent work at that time in the spring.

It will be a good day for the industry when the apiary section is given enough power to act and this slap-happy method of beekeeping will no longer be tolerated to endanger others.

Yours,
Stuart Tweeddale,
Taihape.

This letter has been edited for reasons of space.

ARTIFICIAL INSEMINATION

Dear Sir,

When using the Mackenson and Roberts apparatus for artificial insemination, the queen's sting chamber is first opened by two hooks, the valvfold is then pushed ventrally within the vagina using a blunt probe and, finally, the syringe is lowered into the vagina. The queen's vagina is very small and I find it easy to cause damage with both the probe and the syringe in place at the same time.

It might be very much better to omit the blunt probe and to blow the vagina open with a suitable gas, say carbon dioxide or nitrogen using a double syringe. When the vagina is open the syringe is lowered inside and semen injected via the inner syringe. I am not sure if semen is inactivated by carbon dioxide.

I would be interested in comments from Trevor Palmer-Jones, John Smith or anyone else active in this field.

Yours,
George Nichols,
Nicholbee Honey,
Hokianga.

We have referred this letter to John Smith. We hope to publish a technical article on artificial insemination in the September issue of the NZ Beekeeper.

PURE HONEY NOT FOUL

Dear Sir,

In this age when people are becoming more aware of the need for food to be pure, anything that suggests impurity is viewed with concern. It was, therefore, with some concern that I noted in your December issue you referred to A.F.B. including the term "foul". In your latest issue, you have consistently used the term B.L. Keep up the good work. There is nothing "foul" in honey, bees or brood and the term should not be allowed to creep into our magazine. When it is used and latched on to by the public it does the honey farmer harm.

Does this term occur in The Apiaries Act? If it does, the N.B.A. should take steps to have it removed. British beekeepers have already taken action to ban the term.

Yours,
Small Beekeeper.

Point taken. By the way, we don't normally accept nom de plumes unless there are good reasons why a writer's name should not be used. In this case, the message outweighed our reservations!

MANUKA PROBLEMS

Dear Sir,

I am interested in obtaining a design for a device for assisting the extraction of manuka and rewarewa.

I get a large surplus of the manuka and rewarewa from my 20 (50 next year) hives, and have a 8 frame reversible extractor.

I've tried making a pricking device to puncture the midrib, (explained to me verbally) but it didn't work!

I would be very pleased if perhaps you got someone in the know, to do an article answering how to handle my manuka extraction problems.

Yours,
Trevor King.
Kaukapapa.

References to the extraction of heavy-bodied honeys are as follows:

NZ Journal of Agriculture, 1959, by D. Roberts, Vol. 99 (4): 328-331. NZBK, Vol. 37 (3), 1975, pp 61-65.

We suggest you contact your local apiary instructor, Mr B.M. Milnes, who may be able to put you in touch with other Northland beekeepers who have experience in the extraction of manuka honey.



**KING
BEE**

Fraser thanked

Former NBA representative on the Agricultural Chemicals Board, Mr J.W. Fraser, has been thanked by the NBA executive for his work on behalf of beekeepers. The current representative is vice-president, Michael Stuckey.

Editorial contract renewed

The editorial contract with Agricultural Press Company Ltd for the production of the "NZ Beekeeper" has been renegotiated. There has been an increase in production charges for the 1978 contract, though these have been largely offset by an increase in the advertising rates. The NBA executive has approved the continuation of a special advertising rate for Mr Ecroyd, of Alliance Bee Supplies, in recognition of his efforts on behalf of the industry over the years.

Hive Levy to NBA

A final draft of the bill transferring the responsibility for collecting the hive levy from the HMA to the NBA has been accepted by the NBA executive. It is likely that the bill will go before the house this session. A bill amending the Honey Export Regulations, however, is unlikely to become law during 1978.

AFB no longer "foul"

Eighteen years ago, MAF agreed to an industry request to drop the word "foul" when referring to American Foul Brood disease. However, the "foul" has crept back and the executive of the NBA have asked that it once again be expunged. Mr Walton (chief advisory officer, apiculture) has told the executive that his staff have been reminded of the past agreement, though he did point out that AFB is the internationally accepted nomenclature and for this reason might be used in overseas-circulated MAF publications.

Cawthron study near complete

A DSIR Cawthron Institute study of the chemical characteristics of New Zealand honey is nearly complete. The study was started two years ago when it became apparent that there was no research information available about how NZ honey complied with codex alimentarius standards. The standards set quality minimums for the world honey trade. Recent Australian research shows that some Australian honeys do not comply because their natural characteristics differ greatly from northern hemisphere honeys on which the standards have been based.

Metricated hives

MAF chief advisory officer (beekeeping), Grahame Walton, has informed the NBA that he will investigate anomalies in standard metric hive specifications. He also told the NBA that honey sampling procedures are being reviewed, since problems were encountered in the South Island.

New MAF bee boss

Grahame M. Walton has recently been appointed chief advisory officer (apiculture), the new re-designed position left vacant by the retirement of Mr E. Smaellie, superintendent of beekeeping in August 1976. His appointment was made by a decision of the Public Service Appeal Board and commenced in Wellington in April.

Mr Walton joined the then Department of Agriculture in 1966 at Auckland and has been stationed at Palmerston North since 1968, with North Island responsibilities since 1972. Mr Walton, who incidentally is no relation to the editor, undertook a government-sponsored M.Sc. in apiculture at the University of Guelph in Canada during 1966-68 — a graduate training programme that has been repeated for Mr G.M. Reid, currently stationed at Hamilton.

Hive Levy unchanged

The 1978 allocation of hive levy income to the NBA will not differ from that applying in the last two years. The 1978 allocation will be \$20 000 of which \$10 000 has already been paid by the HMA.

Hastings Beekeeper Seminar

Angus Inn Conference Room, Hastings
July 25, 1978

This one-day technical workshop is organised by the Ministry of Agriculture and Fisheries and will precede the industry's annual conference, July 26 to July 28, 1978. Topics on the programme will include:

- ★ Taxation and the beekeeper
- ★ Sources of finance for beekeepers
- ★ Record keeping for beekeepers

- ★ Accidents and accident compensation
- ★ New Zealand honey — chemical characteristics
— floral characteristics
- ★ "Ideas, innovations and improvisations" session.

The programme will include speakers from the Ministry of Agriculture and Fisheries, Inland Revenue Department, Accident Compensation Commission and Cawthron Institute.

Honey feels the pinch with new pump

by Andrew Matheson, Apicultural Advisory Officer, MAF, Nelson, (formerly Hamilton)
and
Murray Reid, Apicultural Advisory Officer, MAF, Hamilton.

DON BATES and Cliff Bird of Peria, near Matamata, wanted a pump to deal efficiently with the volume of cappings from their automatic uncapping machine. Rather than go to the expense of a sliding vane pump (at over \$400), they have utilised a pump made by a local engineering firm. This is an unusual pump, based on the peristaltic principle.

This type of pump is used in many other fields from medicine to sewage disposal, but its application to beekeeping is a first, for the Waikato at least. In a peristaltic pump, no moving parts of the pump come into direct contact with the honey and cappings. A length of flexible hose is rhythmically contracted, squeezing the contents along inside the tube. This in turn creates a suction, which pulls more honey and cappings into the tube.

The pump is mounted underneath an automatic uncapping machine. Cappings fall into a hopper and from there are sucked by the pump through 29 mm internal diameter rubber hose, the type which is used as suction hose in milking machines. The pump itself consists of an old 200 mm internal diameter pump housing, with the rubber hose laid around the circumference.

A section of hose is rhythmically squeezed against the pump bowl by two rollers attached to a plate which rotates at 60 rpm in the same direction as the flow of cappings.

These rollers are free to swivel on their own axis. This movement of the rollers along the tube forces the cappings through about two metres of hose to a spin drier. The spin drier runs continuously, and the cappings fall from the hose into it. Once or twice per day the spin drier is increased in speed to remove any significant amount of honey

which remains. After a time at high speed the drier is stopped, dry wax is removed for later melting down, and the system is ready for another load.

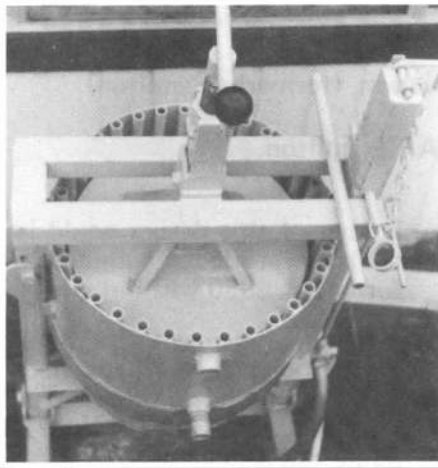
The peristaltic pump deals successfully with honey and cappings within the normal range of temperatures encountered, provided that there is a reasonable amount of honey with the cappings. The system is stopped by the odd bits of broken frames that end up in the hopper. In this case the pump has to be stopped and reversed by hand, but a reversing switch could be fitted quite easily.

Pumps of this design could probably be produced commercially for about \$350 without a motor.

The prototype has a 750 W (1 hp) motor because one happened to be available, but a motor of half that size would be adequate. The pump can also be used to transfer honey from 200 litre drums simply by disconnecting the inlet hose from the cappings hopper, and connecting it up to a hose placed in the drum.

Bates' Apiaries now have reliable and relatively inexpensive method of dealing with a large amount of cappings. □

WHOLESALE PRICE LIST				
NZ Honey Marketing Authority				
EFFECTIVE 1st APRIL, 1978				
Calculated in accordance with the Stabilisation of Prices Regulations 1974 and Amendment No. 1, 1976				
	Size	Doz Per Carton	Wholesale Price Per Doz \$	Suggested Retail Price \$
HOLLANDS				
<i>clover</i>	500 g. Pottle	3	8.33	1.00
	900g. Pottle	2	14.91	1.79
	2 kg. Tin	1	34.41	4.12
SWEETMEADOW				
<i>clover white</i>	500 g. Pottle	3	8.33	1.00
	500 g. Glass Cream	2	8.49	1.02
	500 g. Glass Liquid	2	8.66	1.04
	2 kg. Tin	1	34.41	4.12
<i>Honeygold</i>	500 g. Pottle	3	8.21	.98
SELECTED SOURCES				
	250 g. Plastic Pot	2	4.60	.55
	3 x 250g. Gift Pack	1	15.43	1.85
	500 g. Glass Jar	1	8.49	1.02
	2 kg. Tin	1	34.41	4.12
	12 kg. Tin	each	15.91	22.87
	30 kg. Tin	each	38.99	56.05
PRICE INCLUDES				
1. Freight into store for orders of thirty (30) cartons and over				
2. Freight to nearest railhead for orders of ten (10) cartons and over				
3. Freight to client's account for orders under ten (10) cartons.				



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Operated by mains water, it is simple to use and has few working parts. The quality of wax and pressings resulting from the use of the press is better than that which results from the use of far more expensive devices.

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Mr L.O. Hansen,
"Whitikahu," R.D. 2, Taupiri, Waikato.
phone 605 Orini.

(Please note there is a month's delay in fulfilling orders)

Australian honeys don't fit in codex rules

by Howard Bezar

AUSTRALIA EXPORTS about \$15m worth of honey annually. Her beekeepers are thus particularly concerned with Codex Alimentarius standards which penalise some Australian honeys simply because their natural composition differs in some respects from European or American honeys.

In order to investigate the honey composition problem fully, the C.S.I.R.O. food research division, aided by the Australian Honey Research Advisory Committee, undertook a study of the composition of nearly 100 Australian honeys made from just single plant species. They in turn compared these with Australian commercial blends and straight line honeys as well as foreign ones on the world market.

They tested the honeys not only for the standards laid down by the commission, that is moisture, sugar composition, ash content and the diastase number, but also colour and granulation — factors which determine a honey's acceptability to consumers.

Most importing countries prefer and pay a premium for very light coloured honeys. However, many Australian honeys proved to be naturally darker than most foreign ones. Eucalypt honeys compared favourably as a group ranging from white to light amber but the non-eucalypt Australian flora produce a darker honey,

Wireweed and Blue Heliotrope being the worst offenders. Again the non-eucalypt honeys caused a problem when crystal granulation was measured. Although liquid at first, these honeys tend to form crystals and become partially or completely solid with storage.

The Codex Alimentarius Commission sets a 5 per cent limit on the maximum sucrose level to prevent adulteration. However, the Australian honeys were found to have naturally high sucrose levels. Some sucrose levels were as high as 19.3 per cent and of particular note was honey from White Stringybark, a high sucrose honey even though it is prized for its light colour and low granulation. The Australians feel these honeys are unfairly discriminated against simply because of a slightly unusual natural phenomenon.

Measuring moisture content is also a check that the honey has not been adulterated. The commission level is set at 21 per cent maximum permissible moisture content and Australian honeys had exceptionally low moisture contents averaging only 16 per cent. Only one honey tipped the commission's moisture limit, this was honey from the Broad Leaved Tea Tree.

The commission also sets limits for the diastase number and for the level of HMF (a compound formed when sugar syrups are

held at high temperatures). These help to gauge whether a sample has been subjected to excessive heat or a very long storage. The eucalypt honeys easily met the required levels, but some of the other native flora gave very high HMF readings. Blue Heliotrope, common in Queensland, is a problem flower in this respect in that levels in fresh honey are high and with only a few months' storage the level rises considerably.

Ash content presented no problem for Australian honeys.

The recommendations which arose from the study were especially interesting.

- Special attention should be given to ensure that the honey does not exceed 45°C during processing and handling.

- That a good case could be made for a special dispensation under the C.A.C. specifications for the unusual naturally high sucrose level in Australian honey, particularly White Stringybark, which is noted for its light colour and limited granulation.

- Meanwhile, apiarists and processors should avoid honey from areas containing Broad Leaved Tea Tree, Spotted Gums, White Stringybark, Blackboy, Grand Banksia and Blue Heliotrope.

Further Reading: A Look at Australian Honeys, Rural Research. (a C.S.I.R.O. Quarterly) No.97, December 1977.

Hawkes Bay Conference plans finalised

REGISTER NOW!

PROGRAMME

Tuesday, 25 July:
Ministry of Agriculture and Fisheries Seminar.
26 – 28 July:
National Beekeepers' Assn. Conference.

VENUE

“The Bird Cage” Angus Inn Motor Hotel, Railway Road, Hastings (next to the Racecourse).

ACCOMMODATION

(Tariffs as at February, 1978.)

- Angus Inn Motor Hotel, Railway Rd, Hastings. Tel. 88-177. Single \$19. Double \$24. B'fast \$2. Lunch \$3.50, (smorg). Dinner (a la Carte).
 - Apple Motor Inn (was Travelodge) Railway Rd, Hastings. Within 2 mins. of Conference venue. Tariff: 2 adults from \$20. Terminal Motel Flats and Serviced Motels.
- Up to 1 km from Conference venue:*
- New Grand Hotel, 114 Heretaunga St E, Hastings. Tel. 84-363 Private. Bed/B'fast \$8. Dinner/Bed/B'fast \$11.
 - Albert Hotel, Heretaunga St E, Hastings. Tel. 87-747. Single \$7. Double \$11 - \$13. B'fast \$2.25. Lunch \$2.75. Dinner \$4.
 - Pacific Hotel, Heretaunga St W, Hastings. Tel. 83-129. Single \$8.50. Double \$14. B'fast \$3. Lunch “Bistro”. Dinner \$5.
 - Raceview Motel, 307 Gasgoigne St, Hastings. Tel. 88-837. Tariff: 2 adults from \$15. Terminal Motel Flats.
 - Aladdin Lodge Motel, 120 Maddison St, Hastings. Tel. 66-736. Tariff: 2 adults from \$17. Terminal Motel Flats.

RESERVATIONS

Block bookings for accommodation have been made at both the Angus Inn Motor Hotel and Apple Motor Inn which will be held for members up to the end of June. Therefore to ensure your Conference reservations book early with the Hotel/Motel of your choice.

AIR TRAVELLERS

As the Hawke's Bay Airport is some distance from Hastings, would those members arriving by air please advise our Branch Secretary — Paul Marshall, Auckland Rd, Napier. Tel. 449-160 — of your date of arrival and flight number. We can then arrange for a branch member to meet you with a car to bring you across to Hastings.

REGISTRATION FEE

A registration fee of \$5 a person has been set to cover morning and afternoon tea and other incidentals to help make your stay a pleasant one.

OTHER EXPENSES

Luncheon will be available at the Angus Inn on a casual basis at a cost of \$3.85 a person. Also being arranged is a bus trip for wives on the Wednesday afternoon to Havelock North and Napier at a cost of approximately \$3 each. This will include afternoon tea.

SOCIAL FUNCTIONS

There will be a pre-conference get-together in the main lounge of the Angus Inn Motor Hotel on Tuesday, 25 July, at 8 p.m. following the Ministry of Agriculture and Fisheries Seminar.

The main social event of the conference will be on Thursday night, July 27, starting 7.30 p.m. and taking the form of a dinner and dance. Tickets at \$9 single will be available with Registration or at conference from the branch secretary. (Dinner — smorgasbord).

Please forward your registration and social function applications as soon as possible, and book your accomodation early.

The Hawke's Bay Branch looks forward to being your hosts for this year's conference at Hastings, “The Fruit Bowl of New Zealand” and hopes your stay will be a memorable one.

W.J.C. Ashcroft,
President, Hawke's Bay Branch.

HAWKES BAY CONFERENCE REGISTRATION

To: Paul Marshall, Auckland Road, Greenmeadows, NAPIER.

NAME:

ADDRESS:

.....

I/We will be attending conference and enclose herewith a cheque/money order for \$ _____ made payable to Hawke's Bay Branch N.B.A. to cover the cost of:

Registration fee @ \$5.00 per person.....\$ _____

Social function @ \$9.00 per person.....\$ _____

\$ _____

We will support the Ladies' Bus Trip YES/NO

Signed:



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■ Lily cartons are made in New Zealand under the authority and supervision of Lily Tulip Division, Owens, Illinois, U.S.A.

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South Island representative:
Mr P. G. Collings,
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Christchurch.

ELECTION TIMETABLE

NATIONAL BEEKEEPERS' ASSOCIATION

THIS YEAR, one North Island and two South Island members of the executive of the National Beekeepers' Association come up for re-election by rotation. The retiring members are Messrs E.R. Robinson, W.A. Clissold and K.A. McC. Herron. Of the three, Mr Robinson has indicated he no longer wishes to seek re-election.

By May 19: Roll and nomination forms sent to all branches along with one form to every NBA member.

June 14: Nominations close.

June 23: Voting papers mailed.

July 14: Poll closes, votes counted.

HONEY MARKETING AUTHORITY

THIS YEAR, two members of the Honey Marketing Authority retire by rotation. They have not indicated to us whether they wish to seek re-election. They are: Messrs P. Berry and R.F. Poole.

June 30: Electoral roll of financial hive levy payers closes with the HMA.

July 26 to August 9: Electoral roll open for inspection at MAF offices in all provincial centres, at all branches of the NBA and at the Auckland and Pleasant Point offices of the HMA.

Noon August 16: Nominations close.

August 25: Voting papers mailed.

September 15: Poll closes at noon.

Private export question awaits your vote

PROGRESS TOWARD greater private participation in honey marketing is being delayed until after the September Honey Marketing Authority elections. Until then, the private export of bulk lines of extracted honey will not be permitted.

The private export of packed lines, is permitted subject to HMA controls. The authority made provision for private packed exports some 18 months ago, but apart from one small consignment, no other shipments have been made.

The question of private involvement in honey exporting has dominated the last two industry conferences. It has also been the topic of a number of meetings between the executives and elected members of the HMA and NBA.

At the 1977 industry conference, a remit supporting private exports of bulk honey subject to HMA control was passed by a substantial majority. However, as Ivan Dickinson the HMA chairman points out in his latest newsletter to suppliers, the last two authority elections do not show such a clear decision. At these elections, producer representatives supporting and opposing private exports have been elected. The result be-

ing a balance of opinion on the board for and against liberalisation of private exports.

This situation, according to Mr Dickinson, has resulted in a very broad discussion on all aspects of private exports.

The latest move in this series of discussions has been the dissemination to the industry of a discussion paper which resulted from a top level meeting between the chief executives and chairmen of the HMA and NBA.

This paper outlines the implications of private exporting for both the HMA and its suppliers. One of the most important points made is expanded by Mr Dickinson:

"Any move providing for private exports of bulk lines must include the releasing of the Authority of the obligation to accept all honey offered to it. If it is to remain viable, it must be in a position to compete and not have left to it all honeys that are not required by the private exporter. If this situation comes about, those producers who have the less attractive or problem honeys now dealt with by the Authority, will have no alternative other than to market it themselves. These must then eventually come on to the

local market, creating over-supply and pricing fluctuations."

The discussion paper points out that the HMA's present functions are to export bulk honey, to run a local market packing and wholesaling operation and to accept all honey forwarded to it.

Inherent in these operations is an industry pricing system — which includes advancing payment to suppliers — and the holding of sizable quantities of honey in bulk storage. For these operations to continue, the HMA's overheads need to be covered by handling a certain minimum amount of honey.

As a single exporter, the HMA has the ability to in-effect set minimum wholesale honey prices, thereby minimising the amount of discounting that might otherwise occur on the domestic market during times of oversupply. Against this, is the widely-held belief that private exporters could achieve better results.

The top-level committee which prepared the paper decided that if there was industry acceptance of the need for private exports, some 150-tonnes annually could be released without unduly disrupting the present system. However, many conditions would have to be set by the HMA, before this honey could be released.

The committee also set down "for guidance", the advantages and disadvantages of a liberalisation of private exports.

There are six advantages and 12 disadvantages listed.

The advantages include the possibility of higher prices and streamlined marketing, with the elimination of middlemen; the efficiencies in sending honey direct from producer to shipper; relieving the government of financial involvement and the possibility of greater overseas market exploration. These advantages are probably summed up in the sixth advantage, that liberalisation "is in harmony with the principles of private enterprise".

The disadvantages centre on the effect private exports would have on the viability of the HMA. Once the volume it handles drops below a certain level it would have to cease operation. This would mean that a new pricing scheme would have to be devised and that producers would have to find new sources of working capital to tide them over until their produce was sold overseas or locally.

The other important considerations are the role the HMA plays in balancing the local and export trades and the democratic involvement that producers currently have in the operation of their own marketing organisation. The

HMA today is largely a producer marketing co-operative with involvement from all commercial producers, whether they are suppliers or not. This would not be the case in a private enterprise system.

After considering the paper, the HMA decided that it would not permit any changes in its current ban on private bulk exports of honey until after the 1978 industry conference and the September authority elections. It also decided that the committee's paper should be distributed to all suppliers, so that they would be in a position to decide the sort of marketing organisation they want for their industry in the future. □

North Otago's 50th Anniversary

IN VIEW of the 50th anniversary of the North Otago Branch of the National Beekeepers Association, the branch is arranging to commemorate the forming of their branch on October 3, 1928.

This will probably take the form of a dinner on or about October 7, at Oamaru. Anyone interested in attending please contact the secretary Mr R.J. Irving, 6k R.D., Oamaru, by the end of July.

The organising committee would be pleased to obtain any information concerning the original membership and activities of the branch.

R.M. McCallum, Chairman,
North Otago Branch, NBA.



North Otago BRANCH 1928-29
Annual Report
Your Committee has much pleasure in presenting the first Annual Report of the North Otago Branch of the National Beekeepers Ass. Since its inception in Oct of last year the Branch has gradually become stronger in membership which now stands at 22. During the season 2 meetings and 2 Field Days were held. The meetings were specially held to discuss the new marketing scheme. The field days proved most successful by the attendance and the amount of information gleaned. We extend our thanks to Mr. Jim & Murray Whyte & Dunmore who made their premises available for these occasions. We also extend our thanks to our Officer, Inspector, Mr. Rhodes for his help & advice during our first season's existence.
The financial position of the Branch shows a credit balance of \$100.00 which must be considered quite satisfactory.

On Wednesday night 27th Oct a lantern slide presentation was given by Mr. Rhodes of many interesting slides in the Log Cabin Hall Oamaru.
Mr. Gerald Samuel Sec. of the National Beekeepers Ass. was invited and spoke stressing the aims and activities of the National Ass. The outcome of this meeting was that a resolution was passed that those Beekeepers present form themselves into the North Otago Branch of the National Beekeepers Ass. and adopt the Constitution.
Mr. O. Whyte was elected President for the ensuing year.
Mr. C. R. Peterson was elected Treasurer & Secretary.
The executive elected were:
Mr. H. Macdonald
Mr. J. Robb
Mr. C. Newman
Mr. H. Pearce.
Bla.

Fiji needs volunteer

THE FIJIAN Ministry of Agriculture, Fisheries and Forests wants to establish beekeeping as a rural industry and it is looking to New Zealand for help.

Volunteer Service Abroad has been asked to find an experienced beekeeper to set up the scheme on the main island of Viti Levu, following a successful pilot project. The New Zealand apiary ad-

viser would work with farmers and villages to establish a network of hives which could produce honey for local commercial outlets.

The pilot survey conducted during the past two years has shown preliminary yield figures of up to 200 lb of honey a year from each hive in the drier, northern zones of the island. In the wetter

areas, and closer to Suva, yields of more than 100 lb of honey a hive can be harvested.

VSA's Selection Co-ordinator is interested to hear from beekeepers who could help in developing a rural honey industry in Fiji. They should write to Volunteer Service Abroad, P.O. Box 12-246, Wellington. □

ESSENTIAL ANNUAL PROGRAMME

FROM THE number of letters, telephone calls and personal enquiries I get it is obvious that few amateur beekeepers have yet a clear idea of what they must do each year and that they continue to fumble on, sometimes getting by, sometimes not.

May I once again say that amateur beekeeping *can* be easy and efficient if you have a programme designed to make it so, and stick to that programme.

So, once again, let me lay it on the line. *This is what you must do.*

- **September:**
Full examination, check stores and add if necessary, clean, re-arrange.
- **September-December:**
Queen cell check *every* week
- **December:**
Examine, rearrange, queen to bottom brood chamber, queen excluder on, add supers
- **December-March:**
Check on progress, add more supers as required
- **Late March:**
 - (a) remove honey supers and extract, off with excluder
 - (b) examine, rearrange, check stores
 - (c) requeen
 - (d) close entrance to 2 cms. and overwinter in two brood chambers.

This is the absolute minimum. Do this and we will all be a lot happier. Explanations, expansions, examples and experiences are published from time to time in these notes, but this table should be learnt off by heart, hung in the honey house, put on the bedroom mirror, anywhere where you will be forced to recognise its existence and *use* it.



A FRESH START

The experts learn from their mistakes

by David Williams, Rotorua.

THERE SEEMS to be some idea current that anyone who is prepared to put pen to paper is thereby automatically elevated to the rank of expert.

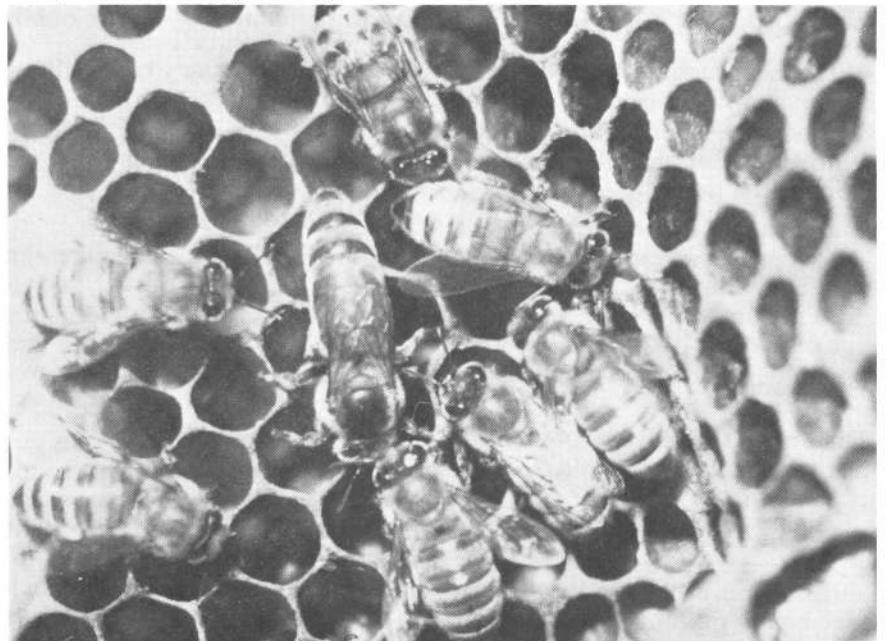
I hotly deny this. Instead of accepting the arbitrary rank of expert and my pronouncements treated as if they came down from Sinai, I can only say that most of my mistakes still lie in the future and are waiting there to embarrass me.

This being the case, we must accept the reality of it, and I

give you fair warning that my mistakes are going to be given to you one by one as they occur, for the sole purpose of allowing you to learn from them, instead of making the same mistakes for yourself.

I hereby wish to place on record my two mistakes this year. Perhaps that is too modest. What I meant to say was, two of this year's mistakes.

In a way they were deliberate ones.



The queen, God bless her!

• In previous years I have made my major rearrangement at the start of December and checked perhaps until Christmas to ensure the queen was not creeping up. Once she got a good arch of honey over her in the second brood chamber she was safely trapped down the bottom, but until that happened she regarded herself as being quite at liberty to lay where she pleased up and down the hive. Last year I decided to use queen excluders on all hives and hold the queen down to two boxes with those, so that although I still did the re-arrangement, I didn't worry thereafter.

This year I omitted the queen excluders and carried out my final pre-honey-flow examination and re-arrangement at the end of November.

This is obviously not quite enough. Of my seven hives, three had brood in the third box when I took honey off on January 20. When I say "brood", in one case there was only one frame with a quarter-moon in the centre frame, another had smaller patches in two combs and in the third there was substantial brood in several frames.

Interestingly enough it was all sealed. Obviously the queen had been up there a while ago on one occasion only and had since returned to the nether regions. Nevertheless, even one frame with brood in spoils the quick and easy removal of honey-full supers. The moral of this story must be:— Either, use queen excluders or, check a few times after your honey-flow starts.

• Mistake no. 2 is not really a mistake. That would be putting it too strongly. It concerns super-clearance.

My invariable method of clearance is by Porter bee escape boards. I slip 'em on one evening and take the honey off early the next morning. This is easy because most of my hives are right here in the garden and the other two just up the road. This year I decided to experiment. Once before I had tried to blow bees out of supers with a vacuum cleaner in reverse, but the little beggars had clung like limpets. That was with the super on top of an empty super into which they were in theory blown. It didn't work, but what if I simply opened up the top of

the hive and blew in there? Would they take an assisted-move down? No, they didn't or wouldn't. There was a certain agitation and some thinning of the crowd but no significant reduction in total numbers. Back to square one.

While vacuuming one I had put fume tops on another two. I am no great believer in fuming, but thought it only fair to include it.

Once again, it must be recorded as a failure. It might work on a shallow super but did not on full supers even five boxes up where they had plenty of space to move down.

This time there was certainly a dramatic clearing out, but by no means the cool, quiet, slow evacuation one gets with overnight clearer boards, and a few dozen bees stayed in the super in spite of the noxious repellent.

In fact, in order to try for a full clearance in the top super I left the fume board on too long on one hive and all the bees went out the entrance and up the front of the hive in great festoons. It took over four hours before the bulk of them went back inside and some of them

More on clearing supers

by David Williams, our expert hobbyist

■ The best justification for putting an empty super on below a full one is when you want to remove the full one. The sequence would then be:

- a) Remove full super
- b) replace with empty
- c) put on escape board
- d) replace full
- e) take full off early next day, plus board, replace mat and lid.

This means that the bees have plenty of space to move into, both down and up.

■ Please note that temperature seems to affect clearer efficiency and that on a hot night with the hive below fanning vigorously for temperature control and nectar

concentration the bees above may decide to stay there. The empty super below may well improve clearance in this case, or you may find it easier just to wait for a cooler night!

■ John Herbert at Lake Okareka reports poor clearance in February in the middle of the long hot summer, but excellent at the end of March when temperatures were down a little.

■ John also reports that he got spring queen cells in both his hives in spite of an autumn requeening, and one resultant swarm which he managed to recapture, so the queen cell check may be more vital than the requeening in swarm prevention.

Plan on doing it each and every week from the beginning of October to the beginning of December, adjusted for area.

■ The four hives I kept in town were not sub-divided and they went through without any queen cells whatsoever. Perhaps the mere act of separation of bottom and second brood chamber each week and peering at the bottom of the frames in the top half helps to discourage them. We may be on the verge of a major scientific breakthrough! There may even be something in the urban environment that, allied with other precautionary measures, reduces the incidence.

are still outside as I type, six hours after the fuming.

The other method tried was the smoke-and-shake routine, where I simply opened up the top, smoking as I went, then puffed down between the frames. I would say that this method was intermediate between blowing and fuming in immediate result. The bees didn't react with quite the same frantic buzzing and fanning as with fuming, and a goodly proportion of them moved down. I then removed the super onto a pseudo lid and banged it by raising one end a few inches and dropping it a few times. That removed perhaps 75 per cent of the remaining bees.

I then took all supers to the honey house store room and stood them on pseudo lids with another on the tops of each of the two piles I made.

These pseudo lids are false lids with a full rim round the bottom and a rim round the top with an entrance (or, in this case, exit) in one corner. Remaining bees exited through these, settled on the window, and were ceremonially ejected two or three times during the afternoon.

Next season I shall be using

- Queen excluders.
- Clearer boards.

I can manage without either, but I won't.

Incidentally the two fume pads I used were both "manufactured" for the occasion by simply removing the tin top from two hive lids I had been given and which proved irritatingly just a fraction too small to fit comfortably over my home-made supers, throwing the wood rimmed roofs away (actually my wife found them very useful for giving away begonias in) and gluing a hive mat inside each tin tray.

For gluing I used a full small plastic bottle straight from the shop for each one (each 60 ml of Davis all purpose PVA white resin glue) which seemed to work quite well. I smeared the tin, then worked the hive mat onto it, turning it round a few times

and making sure it was well spread, then left overnight and used it the next day. I did have to cut the plastic bottles open to get all the glue out, but that may have been because I hadn't shaken it enough before I started.

POSTSCRIPT

And an amusing and almost irrelevant postscript. It's been a good honey year. It's also been a good year for plums and, after we had given away as much as we could to friends and neighbours, I proposed to put a notice at the bottom of the driveway saying "Free plums. Please come and help yourself." The children (aged 13, 11 and 10) were absolutely horrified. "You can't do that", they screamed in unison. But it turned out it was perfectly all right to SELL plums, so we put the notice out at 10c a lb and

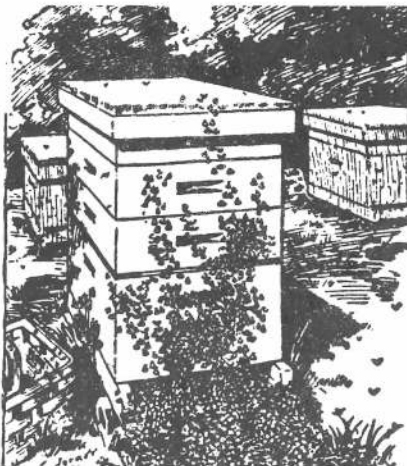
they all went very nicely in a couple of days and we made some new friends and could park the car in the shade without over-ripe plums falling over it, and the children got a little pocket money and everybody was happy.

What has that to do with honey? Well, the children asked me today what I was going to do with all the honey from the 20 or so supers I had sitting out in the honey house. "Oh, I might sell a bit, I suppose", I said. The children were absolutely horrified (come to think of it, they often are), and said in shocked tones "But, Daddy, you can't SELL honey!"

There must be a certain logic in there somewhere, but I just can't see it myself. Must be all those years of my wife giving all our spare honey away to her friends and various sales tables.

Readers' queries

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.



ROBBING THE HONEY HOUSE!

Dear Mr Williams,

I wish to keep a beehive in my backyard but the only place I can put it is a few yards from my honey house. The problem I am faced with is robbing at extracting time. I do not wish to shift the hive until I have finished extracting, so is there any other way over the problem?

Yours,

A.D.
Christchurch.

I don't think you will have too many problems if you handle things correctly. My five hives are only a few yards from my honey house and I have learnt through experience that:

- The bees must get no hint whatsoever that there is honey there for the taking.*
- This means that I take the supers off in late evening and extract immediately (preferably on a cooler evening when the bees prefer to stay home anyway).*
- Everything must be completed, cleared up and washed up that evening.*
- The honey house must, of course, be bee tight in the first place.*

Before this regime was adopted I had sad experiences of the bees and I competing for the honey. Now I get it off, extract, into a sealed barrel, wash extractor and knife and everything else with plenty of hot water, clean up honey house, get supers back on the hives for the bees to clean up, and all in the one evening. It works for me, and should for you.

Yours,
David Williams.



FROM THE COLONIES

HAWKES BAY

The dry spell over the past season did leave its mark on the honey crop, with the Wairoa area having a better than average year, while the remainder of the district scored only an average crop.

Branch activities have been on the quiet side apart from our Annual General Meeting when we had as our guest John Smith, apiary instructor from Christchurch. He gave a talk on his recent trip to Poland and Instrumental Insemination of Queens. An evening thoroughly enjoyed by all who attended.

Behind the scenes the committee has been working hard making arrangements for this year's conference. We are particularly pleased that the Ministry of Agriculture and Fisheries has chosen this year to hold a one day seminar on the Tuesday of conference week. A good venue has been set up, and the branch looks forward to welcoming fellow NBA members to Hastings.

Paul Marshall,
Napier.

NORTH OTAGO

Our branch looked back 50 years at the last General Meeting with the minutes of the inauguration of the North Otago Beekeepers' Association in October, 1928, being read out. A committee was formed to organise suitable celebrations to mark what is really a great milestone for beekeepers in our region.

The meeting was combined with a Field Day for the branch at Max Lorys. We were invited to look around his new honeyhouse which proved very interesting. We also enjoyed the light refreshments he provided afterwards! Thanks Max. Everyone was very relaxed, no doubt being due to the end of a very frustrating season.

However, we were not all in the same boat. Those living on the coast recorded quite a good season, while we inlanders had poorer crops — this being due to that fateful drought which no doubt everyone experienced in varying degrees.

On the cheery side though — the drought has broken with five inches of rain falling in April. Although too late for us, some members of the community are smiling — namely, farmers. Maybe the rain will be shared more fairly next season.

R.J. Irving,
Oamaru

SOUTH WESTERN DISTRICTS

With most of the honey crop now harvested, it looks as though the yield could be above average, and of very good quality.

The South Western districts, of which the Wairarapa is a part, had its anxious times throughout the spring and early summer. With the never-ending rain of late winter and spring, December arrived with very little grass cover and the ground packed hard. Only a fortnight of hot sunshine under these conditions "was needed" for the pastures to burn off and the ground to crack open. This had every appearance of the start of an early drought.

But there was a happy ending. With the warm rain over the New Year, followed by the sunny days and hot nights of January, the clover flowered in profusion and anyone with good strength hives could not help but do well.

Our annual general meeting which took place recently, was well attended, and was rounded off very nicely with a most informative talk and the showing of slides by Mr John Smith, Apiary Instructor, Christchurch. Such was the interest shown in this new technique of queen bee breeding and also of his talk on the people and places he saw on his travels through Poland, that the meeting carried on till late in the afternoon.

Chris our past chairman, stepped down after three years in the chair and his place was taken by Trevor.

These two members have been the main strength of our branch over the years and I am sure the only sign of appreciation they might expect is a continual good attendance at our meetings.

Congratulations to Trevor also on receiving a letter of commendation from the authority on the quality and condition of the honey sent in by him this season. It's good to know that some parts of the North Island can still deliver the goods.

Trevor is one of our more progressive beekeepers and it is good for him to receive this kind of encouragement.

Stuart Tweeddale,
Taihape.

NORTHLAND

The honey season turned out to be an average one in most places. With the dry weather, one would have expected perhaps a better crop, but apparently the clover let us down a little this year. It seemed to have a fairly short flowering period.

The bush gave us a useful little flow in March this year. The Towai had a drawn out flowering period, and the white flowering Rata was late. We have a little green grass around at the moment so we are apparently a little luckier than some.

On Saturday April 1, Mr Terry Gavin spent an interesting day judging the Whangarei Bee Club's honey. Like most of the honey this year it had a nice amount of colour in it.

P.G. Smith,
Whangarei.

For sale

Good beekeeping business in Central Southland as going concern. 3 bedroom, B Rc house. Modern honey house. Has good potential.

For further details write, C.M. Cunningham, 157 Great North Rd, Winton.
Pd J/78.

QUEENS

Bill Goldsmith of Edgecumbe (Bay of Plenty) writes: "I like your Queens — quiet to handle and gather good crops of honey." What more does anybody want?

Inquiries invited for limited numbers during coming season.

CHRIS DAWSON

Queen Breeder

P.O. Box 423, Timaru.

QUEENS

QUEENS

QUEENS

WAIKATO

It was a good idea, well planned, and convenient: Just wheel the extracted combs straight out into a barn built against the honey house. The 100 hives in the home yard will soon clean them out.

At last the great day came and the day's combs were put out, but alas this should be headed, "Wild bees take over Waihou", as I was told there were bees everywhere — post office, shops, houses.

Some have finished extracting, some still have a way to go, and most seem to be filled up with full drums.

The new cappings pump designed by a Matamata firm has now pumped the cappings as fast as the machine takes them off but cold cappings are a bit slower than the machine. It will pump honey out of a drum — just put the inlet pipe in and away it goes.

Now that the Auckland branch has joined with Waikato we have a good attendance at branch meetings, but this has limited the opportunity of many to take part in the discussion. The same few seem to hold the floor, and the young members don't get a chance.

The same theme is taken up at every meeting and gets a bit monotonous. But I suppose we can't do much about that. It reminds me of the late E. Sage. In a voracious debate, he exclaimed, "If only the other chaps could be reasonable".

Providence nearly gave us a break at the last meeting. Several members were caught in the lift when it broke down, and had to spend some time there on their own.

Cliff Bird,
Matamata

SOUTH CANTERBURY

Nature has a way of balancing things up, after the second driest period since records were commenced, we then had the second wettest April on record. Pasture growth was phenomenal, easing the problem farmers were most dreading, the winter feed position. While farmers as a whole throughout the country are having a pretty bad time we beekeepers have had it very good. The dry late summer and autumn has allowed us to finish up the season's work early to get on with the normal winter maintenance etc.

Also those working the honey dew have had it very good, but wasps were very bad, we destroyed more than 100 nests within less than a half mile of one large apiary. The number of wasps in the air and working dew was just unbelievable and no doubt had we not taken the time to kill off the wasps, we would have lost a large number of hives.

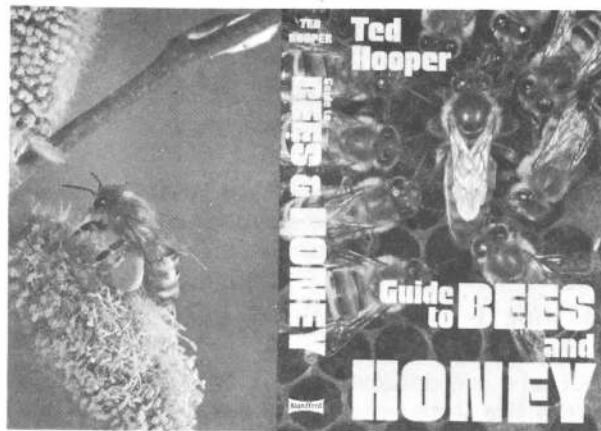
We are now at the time of the year when branches hold meetings to formulate remits and to consider those from other branches. Those attending these meetings would do well to take great care to know what is proposed and how they vote.

It may be of interest to add some of my experience in wax recovery especially as this is the time of the year when most beekeepers will be cleaning up old combs, etc. I kept an accurate record on the wax recovered from our old combs and the results were enlightening. I recovered 4.7 pounds or 2.126 kilograms of wax from each super of ten old full combs. The combs were first placed in a steam box, steamed and then the slumgum pressed in air operated presses exerting 45 psi. on the slumgum. At the present price of wax all beekeepers should look closely at their own system of wax recovery.

Harry Cloake.

Described in "NZ Beekeeper" as

BOOK OF THE CENTURY



"GUIDE TO BEES AND HONEY"

A complete handbook for the beginner and experienced beekeeper, practical, completely up-to-date and copiously illustrated in colour and black and white. The author, Ted Hooper, has been keeping bees for over thirty years. In Guide to Bees and Honey his aim has been to replace the mystique and legend of an ancient craft with a practical approach, using the results of modern research techniques, and writing with enthusiasm and clarity.

Available from the NBA, Box 4048, Wellington.
for only \$12.75 a copy.

"Allow 4 weeks for delivery".

SPRING QUEENS 1978

Order now to secure delivery of new season spring queens.

COMMERCIAL SUPPLY

\$4.00 each, delivery from October.

HOBBYIST SUPPLY

10 or less, \$4.50 each. Telegrams, if required, plus 80c. Order direct or write for further information.

TERMS

Cash with order.

We are grafting some excellent Italian breeder queen stock and obtaining mating control with high density drone saturation. All our work is carried out using natural colony influence in a disease-free area.

For further information contact:

SURFSIDE APIARIES

(BRUCE STANLEY)
P.O. Box 2047, Whakatane.

WHEN A BEE stings, it clings to its victim as tightly as possible, and curving the tip of its abdomen round and down, drives the sting in as deeply as it can.

The action is rather like hitting with a hammer and the people stung have said it feels rather like it too!

The sting is not smooth. It is barbed and bulbous.

The barbs are designed not only to hold the sting in the flesh but also to work it further in once it is there. This is done by muscular action, one barb holding while the other works a bit further in, and vice versa. The sting could almost be said to "ripple" in.

This muscular action also helps pump in the poison, though the expansion and contraction of the attached poison sac plays the major part in this.

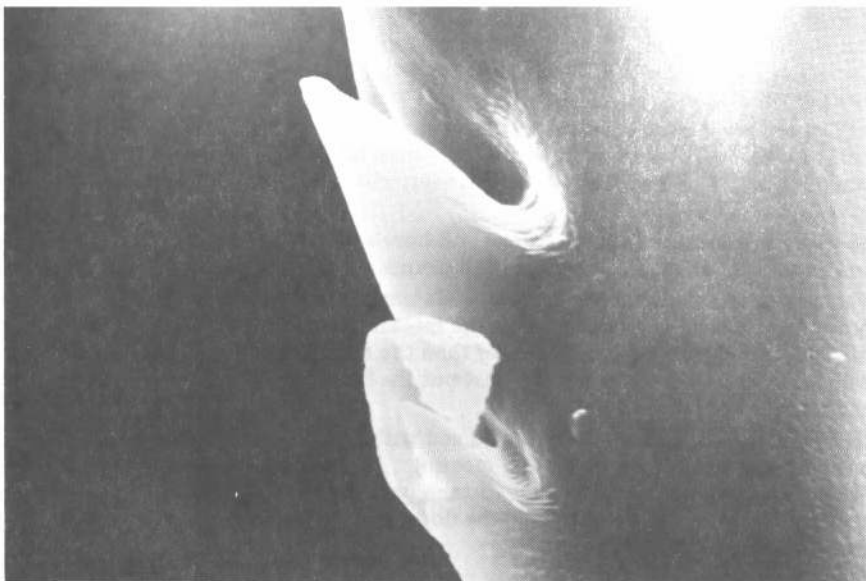
This activity is triggered off by the impact and continues even after the sting and attached sac have been torn from the rear portion of the abdomen as the bee attempts to withdraw it.

This is why the experienced beekeeper immediately *scrapes* the sting away as soon as he feels it. Dragging it out between finger and thumb merely completes the job of emptying the contents into the flesh.

It is almost true to say that only the workers have stings. But the queen is provided with a smooth, curved one which she apparently only uses against her royal rivals.

The sting itself is a modified ovipositor, or egg-laying tube. The worker has very little use for an egg-laying tube. However, as an imperfect female, she is given one but, with true thriftiness, nature makes it serve an alternative purpose, that of defence of the hive.

The sting has been jokingly called a hypodermic (which is only a compound word meaning "under the skin") but is a little more subtle than that. Being cellular and biological, rather than crystalline and metallic, the orifice is



Sting barbs (with human flesh!) are designed not only to hold the sting in the flesh, but to work it in further once it is there.



Sting tip.

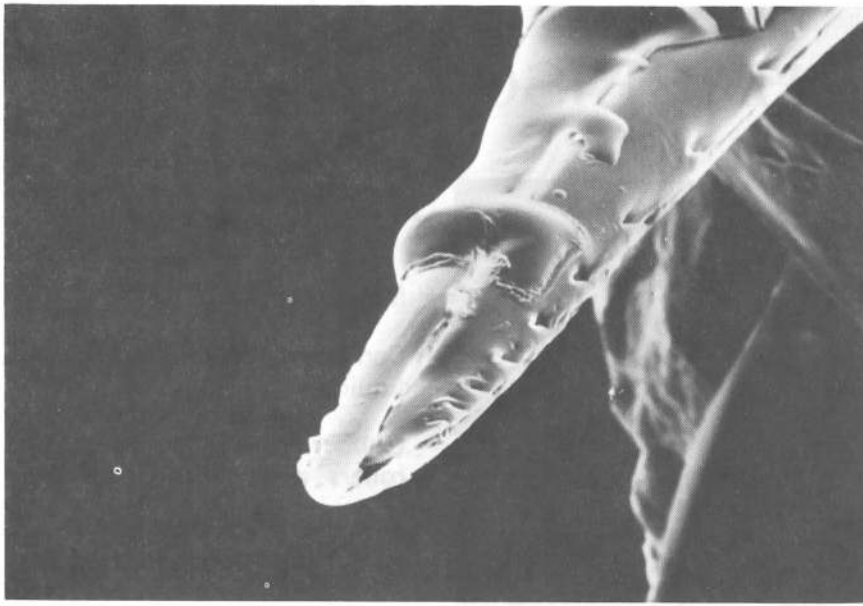
THE BEE STING - or what

not directly at the tip where it would weaken the structure. Instead, it is sited slightly below the tip where it can do its job of releasing poison after impact after the tip itself has taken the shock of piercing and penetration.

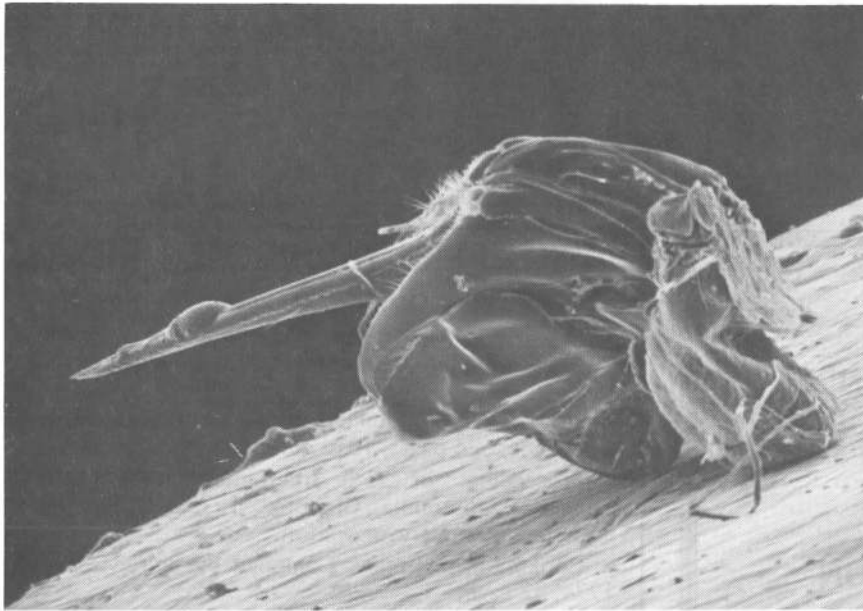
Like the hypodermic the bee sting is designed to be used again. It is for the defence of the hive from any threat, whether from a mammal, bird or insect. Even

though the sting tends to remain embedded in animal flesh, when the bee stings another bee or wasp the sting breaks the brittle outer covering of chitin and is withdrawn and used again.

The sting of the wasp has barbs too, but these are much smaller than those of the bee and so may not stay in the flesh in the same way. Thus a wasp may use its sting to attack you several times.



View of sting tip showing ovipositor origin.



The sting and poison sac of a worker bee. Its use is always defensive, not offensive, so act accordingly.

got into you last summer?

It is fatal for a bee to lose its sting. Although it may fly away after stinging and even return to the hive and behave normally for a few hours, the bee will eventually die.

Bee venom has been compared with that of the cobra. The best expose of this I have seen is Professor Habermann's article in *Science* of July 1972 entitled "Bee and Wasp Venoms". It's

a highly technical paper, but if you are that way inclined drop me a line and I will post you a reprint.

Bees are not sensitive to sound. This is not as exclusive as it sounds because bees in the hive are responsive to vibration and atmospheric pressure. Because sound is obviously merely another form of vibration it may be regarded as such by the bees.

Obviously there is not a lot you can do about barometric pressure, in spite of those weird advertisements that exhort you to "turn on a summer's day". However, don't disturb the hive when atmospheric pressures are dropping and the bees are bad-tempered. And lift the lid gently when examining, because its removal naturally changes pressure in the hive. If a hive mat is taken off roughly, one often exposes a whole host of bees point up and prepared to defend the hive to the last sting.

Vibration is certainly more open to your control. For this reason any approach to hives and all manipulations at hives should be as quiet and gentle as possible.

What is the sequence if a clumsy cow, an inquisitive dog, a bee-eating bird, or a clumsy human comes along?

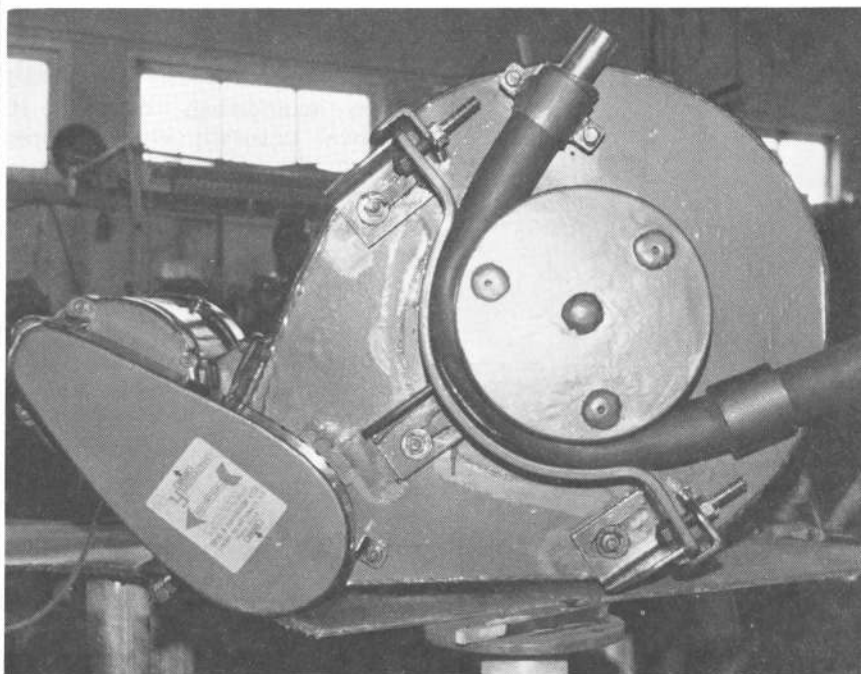
First, the approaching and increasing vibrations will trigger off the alarm mechanism. This will alert the hive, but particularly the guard bees who will raise their stings and squeeze out a drop of poison at the tip.

The scent of the venom will then drift through the hive and enhance the state of preparedness.

In some cases some of the guard bees may decide that quick action is needed and zoom out immediately to sting the nearest suspicious object. Other bees are then attracted to the same spot and excited to sting by the scent of venom at the sting site, which is why wise beekeepers smoke the area affected immediately they have scraped off the first sting.

Because the chemical "alarm" particles may take some hours to disperse from the hive bees appearing unusually antagonistic when visited may be on the run-down from an earlier alert. The rate at which the colony takes to calm down depends on many things including the intensity and size of the colony, time of year, temperature and humidity. It may also explain accounts of innocent passers-by suffering apparently unprovoked attacks.

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BEEKEEPERS TECHNICAL LIBRARY

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

The following books have recently been added to the Library:—

- Honey — A Comprehensive Survey. Edited by Dr Eva Crane, 624 pages, 1976 edition.
 - Proceedings of 25th International Apicultural Congress, Apimondia, Grenoble, 1975 — 615 pages. Presented by Mr Trevor Walton.
 - Cooking with honey. Compiled by Shirley Lind, 1974, 32 pages.
 - Biological Aspects of Nosema Disease. Symposium, 112 pages, 1977.
 - Beekeeping in Cold Climate Zones. Symposium, 112 pages, 1974.
 - Hive Products — Food, Health, Beauty. Symposium, 154 pages, 1974.
 - The Bee Book — History and Natural History. By Daphne More, 144 pages, 1976.
- A second copy of the above book has been donated by Theras J.L. Broadley of Paeroa. Thank you Mr Broadley — your gift is much appreciated.

- Guide To Bees And Honey. By Ted Hooper, N.D.B., 260 pages, 1976.
- Bundles of magazines. A new supply now available — send 50 cents.

Books are available to financial members of the National Beekeepers Association. Send stamped addressed envelope to the Hon. Librarian, Box 423, Timaru, for copy of catalogue and rules.

The intensity of the attack varies with the level of excitement caused by the threat.

It is not unusual for one bee to start menacing fly-pasts as I examine my hives. Usually I take little notice of it and it eventually goes away.

If it persists I leave the hive and walk quietly round a feijoa bush a couple of times and that usually

loses that particular nuisance.

However, a friend of mine knocked a hive with his mower and was chased half a kilometre and into his house where he cowered under a coverlet in the bedroom and wished the buzzing would go away.

On the other hand, I had a call from a lady last year whose horse had half-knocked over a hive and would I care to help. The horse

was calm and obviously unstung, the bees were carrying on quite happily with one corner of the brood chamber on the ground and the rest at 45 deg to vertical, and I slid it back into position without any bee showing anger in any way.

It obviously all depends on circumstances. Just remember that the sting is always defensive, not offensive, and act accordingly.



BOOK REVIEW

BEEKEEPING IN AUCKLAND

by RAY CHAPMAN — TAYLOR and TOM DIXON, distributed by
Auckland Beekeeper's Supplies at 850 Dominion Rd, Mt. Eden,
Auckland 4. price \$2.80

SUB-TITLED "Notes for Beginners", the obvious question we must ask ourselves is, if we were only allowed one other book in addition to the standard "Beekeeping in New Zealand", would this be the one?"

The answer is, most reluctantly, *no*.

It does not have those features necessary to ensure that the beginner has a happy and trouble-free introduction to beekeeping, it does not have the simplicity of sequence and presentation to make it easy to follow, it does not have that sense of safety and ease of manipulation that would make beekeeping a pleasure rather than a duty.

I hope to meet the authors one day — when, no doubt, they will demand my head on a lordly charger — and congratulate them on a gallant attempt to fill the yawning gap that has always existed in the literature for New Zealand beginners. But. . .!

It is not enough say the booklet is designed for Auckland. It may be so, but much of what is applicable to Auckland must of necessity apply to the rest of the country, while the timing for Auckland appears little different to much of the rest of the North Island.

Separate from the criticism above are those features which differ from personal techniques. This is one problem with beekeepers.

Any technique that varies from their own is wrong rather than merely different.

Thus their advocacy of the 10-framed, single storey brood chamber goes wholly against my own experience in which I have found that a nine-frame spacing makes management and manipulation much easier. I have found that brood in one box is conducive to swarming and that queen cell checks are much simpler in two storey brood chamber hives.

That is in Rotorua and I would have thought the problems worse rather than better in Auckland, yet their system obviously works for them or hivemaster of the Auckland club, Tom Dixon, would not be co-author here.

The system does seem to involve a constant manipulation of frames, making the management of such a compact brood nest more "fussy" than necessary.

However, their general approach to beekeeping is excellent. Even though they call beekeeping an art, they do at least treat it as a science, and the book is wholly practical throughout, even to telling you exactly what to do and, more importantly, when to do it.

It would have been of interest to know how many hives each of the authors had. There seems to be a peculiar emphasis on two hives, even an emphasis on having one weak and one strong, where simple exposition of the one-hive

situation might have been more straightforward.

They have much practical advice on feeding (although many beekeepers have found that the feeding of dry sugar in anything but a suitable container inevitably causes a greater or lesser degree of mould on hive woodware), on moving hives (although it might have been wise to emphasise that the top ventilation is an addition to gauze in the entrance on longer moves, not instead of it), and on many other facets of this most fascinating of hobbies.

Much of what they say is so practical and so useful that we can agree wholeheartedly with it, yet, as in all such advice, it is those points with which one does not agree that attract attention. Unfair, but inevitable!

Reviewed by David Williams, Rotorua.

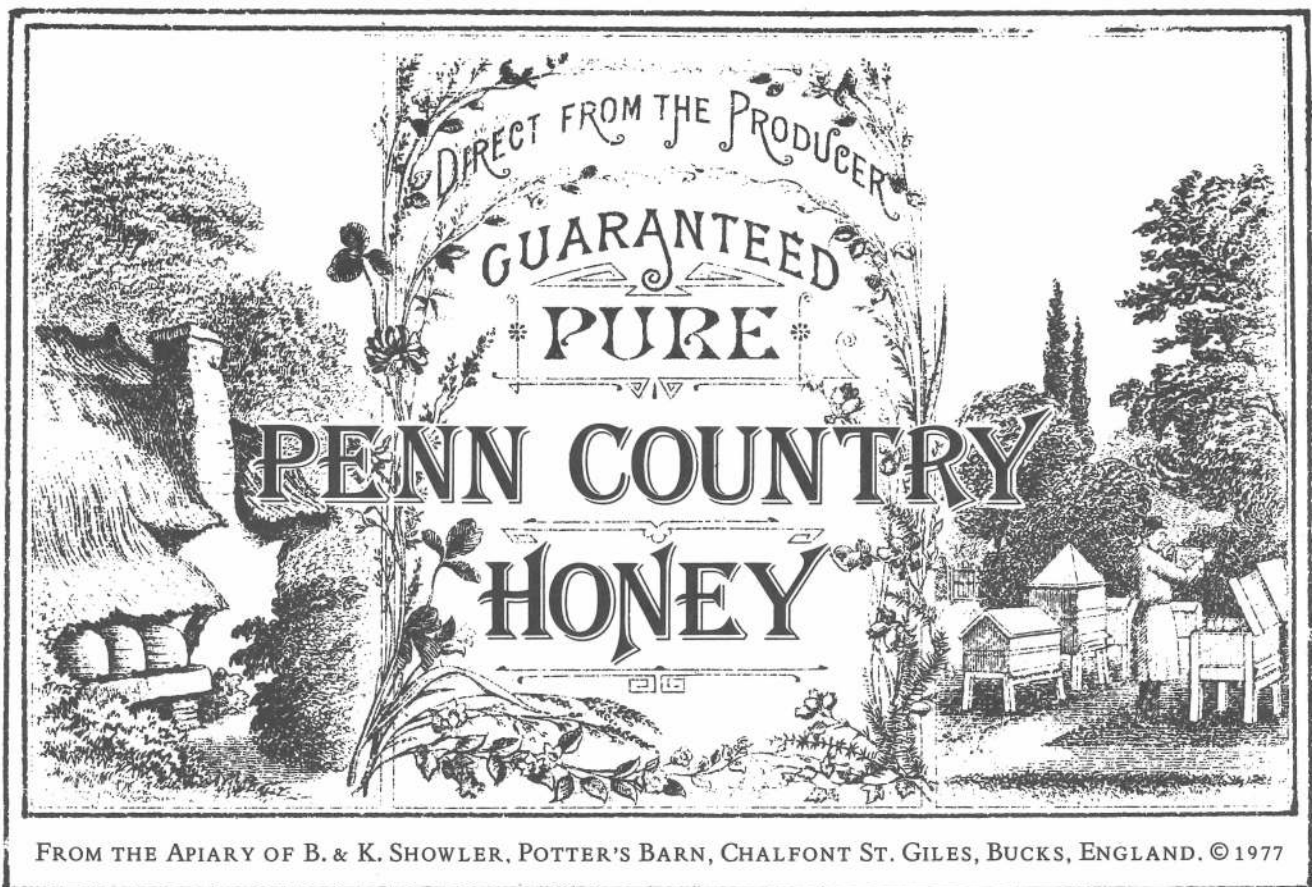
SORRY, MR HOOPER

Dear Sir,

Please convey my apology to Mr Ted Hooper for incorrectly naming his book in my Review in your last issue. The correct title is "Guide to Bees and Honey" as shown in the advertisement on Page 30. I named it "Guide to Bees and Beekeeping". Although the name I gave it is incorrect, it is correct — it is a guide to beekeeping and the best on the market today.

Please accept my apology, Mr Hooper.

Yours,
Chris Dawson,
Reviewer.



FROM THE APIARY OF B. & K. SHOWLER, POTTER'S BARN, CHALFONT ST. GILES, BUCKS, ENGLAND. © 1977

This illustration is an updated version of an 1883 honey label which is used by the author as a Christmas card and as a trade mark. "On one display," he writes, "the card was taken and not the honey. I hope this speaks well for the card!"

William Charles Cotton and the first bees in New Zealand

by Karl Showler, Chalfont St, Giles, Bucks, England

PART OF THE story of the Reverend Cotton's attempt to take bees to New Zealand will be found in Volume VII of the "British Bee Journal". In the issue for July 1, 1879 the editor, C.N. Abbott, published the first of three posthumous appreciations of Cotton's contribution to beekeeping in the United Kingdom and New Zealand.

William Charles Cotton who died on 22 June 1879, was born in 1814 into a distinguished English family. His greatgrandfather, grandfather, father, brother and William Charles himself were all

mentioned in the "Dictionary of National Biography", published in London at the end of the 19th century.

As a boy reading in one of the classical authors of the practice of bugonia (raising bees from the carcase of a dead ox), young Cotton planned to kill one of his father's cattle and raise a swarm for himself. Fortunately he was forestalled by the gardener and in due course his father presented him with a swarm.

His love of bees was a lifelong passion, as a student at Christ Church College Oxford he was a

founder and secretary of the Oxford Apiarian Society (1833). In 1837 he published his "Short and simple letter to Cottagers" and three years later a second "Letter" in which he records that he distributed 24 000 copies of the first letter.

Not content with the two letters, Cotton represented them in book form with a prelude of mottoes about bees, a preface, and extensive extracts from other writers and his own note book. The whole concluded with a plan for taking bees to New Zealand and was published in 1842 as "My

Bee Book" when Cotton was in fact en route to Wellington.

In 1970 Kingsmead Reprints, Bath, England, reprinted "My Bee Book" in a nice gold blocked leatherette binding, including a simulation of the bee logo used by William Cotton on his own collection of books and on the commercial binding of the original "My Bee Book".

There are strong links, if not direct evidence, between William Cotton's work in the Church of England and his wish to make beekeeping attractive to the poorer sections of the community. Both his "Letters" and "My Bee Book" intermix religious sentiments with practical beekeeping. One gets the feeling of the muscular Christianity of the Oxford Movement, with its "Tracts for the Times" (1833-1841) which made the case for the reform of the Church of England.

It would be interesting to know if the Cotton family arranged for their son to be appointed as domestic chaplain to Bishop Selwyn's missionary party when it left for New Zealand, in order to divert him from the path into the Church of Rome followed by so many young clergy at that time. The Oxford Movement leader J.H. Newman was received into the Catholic Church in 1845, by which time William Charles was helping Bishop Selwyn organise the first Anglican synod conference for 130 years.

These formal gatherings of diocesan clergy did much to mould the colonial church and ultimately the church in the home country. Bishop Selwyn was active in the protracted and often difficult work of peace making during the first Land War with the Maoris and we also know that he and his domestic chaplain found time for the less exciting task of translating the bible into "the native tongue".

In 1848 the Rev. Cotton published his "Manual for New Zealand Beekeepers" which makes no mention of how the four stocks of bees he brought with him on board the Tomatin fared. The "Cottage Gardener and Country

Gentleman", London, December 7, 1858, published a premature obituary notice for "the late Rev. W.C. Cotton". This included a note from A Devonshire Beekeeper to the effect that the crew of the Tomatin threw the bees overboard as they attributed the stormy passage to the presence of the bees on the ship.

On the other hand the British Bee Journal speaks of his mastery over his favourites during the passage and there is no mention of their loss in obituaries following his actual decease in 1879. In 1882, in reply to a letter, the then Editor of the British Bee Journal wrote, "In 1841 the Rev. Cotton took four stocks of bees to New Zealand and Mrs Allom sent two other lots a year later, one of her consignments dying en route; from these two colonies sprang all the black bees in the islands. In 1880 two colonies of Italian bees were imported from the west coast of the USA and other importations followed, it was (then) "expected that the black bees would be displaced by the prolific ligurians".

On his return to England from New Zealand (1857) the Rev. Cotton accepted the living of Frodsham in Cheshire, subsequently throwing himself wholeheartedly into the discussions which led up to the formation of the British Beekeeping Association and the establishment of local and then national British honey shows. By the late 1860s he had an established national reputation and in 1873 judged at the Manchester Show, England, where he saw and bought for £10 the magnificent glass super which subsequently became known as the "Manchester Super". This had been produced by Mr Breen of Arwick, Manchester, and weighed over 87 lb.

When the results of the Manchester Show became known, a long correspondence developed in the British Bee Journal as to the possibility of producing such a super by natural means or if it was created by artificial feeding. A year later when acting as a judge at the first English national show,

"The Great Bee and Honey Show" at the Crystal Palace, Sydenham, London, William Cotton brought the "Manchester Super" with him, it "received a great deal of attention but was not in competition" recorded the British Bee Journal.

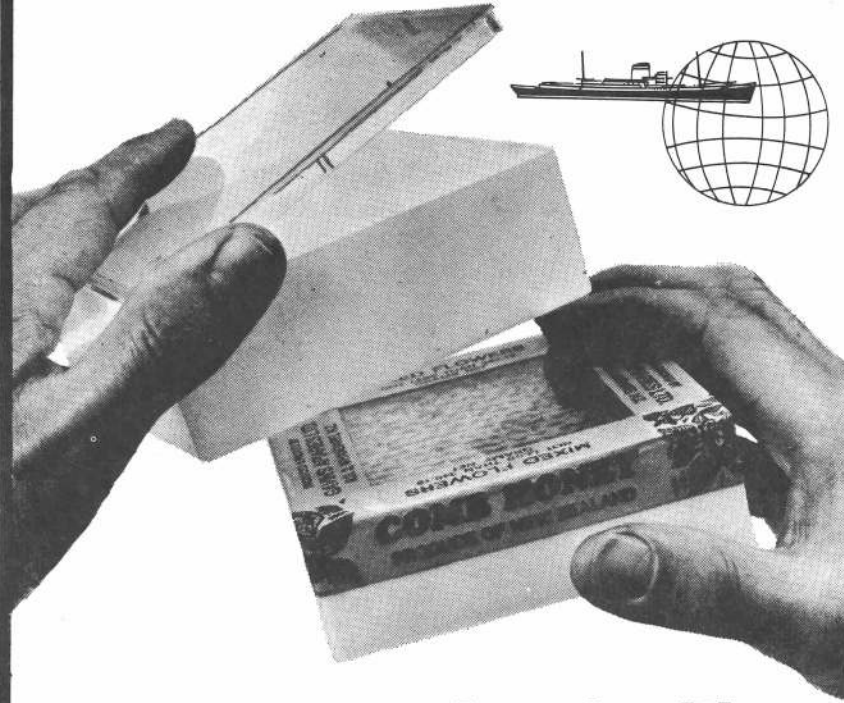
William Cotton does not seem to have contributed to the early issues of British Bee Journal unless under one of the nom-de-plume favoured at that time, but he did publish a translation (1872) of William Busch's "Schnurrdburr" under the title of "Buzz a Buzz" a humorous German book about bees, which seems to have reflected something of the character of the translator, whose burly form (weighing upward of 20 stone) clad in a quaint blouse, attracted attention at the Crystal Palace Show.

William Cotton did not marry, and in his will left to the Frodsham Rectory the library of over 300 English and European bee books he had built up. They are perhaps one of the finest collections of bee books of that period in a uniform leather binding, each book being stamped with the Cotton arms and a queen bee logo. This so filled the Frodsham study that his successors could not use it, so one of them hit on the idea of presenting the collection on loan to the Ministry of Agriculture, London. Today it may be seen in the Ministry of Agriculture Library, Whitehall Place, near Trafalgar Square, London, together with the British Beekeepers' Association library and other interesting collections of bee books.

In 1976 M/s Newrick Associates Ltd, of Wellington, New Zealand, reprinted as a limited edition (850 copies) "A Manual for New Zealand Beekeepers" of which 50 were in full calf leather and the remainder in Almond Kivar Bookcloth.

A copy was especially flown from New Zealand for exhibition by International Bee Research Association, at the National Honey Show, London, England. IBRA include this attractive little book in their international list of publications.

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Packaging lessons from export fair

by Mike Stuckey
and Trevor Walton

BUYERS FROM many parts of the world recently had a chance to see some of the best New Zealand has to offer. Included among the many fine primary and manufactured products on show at the New Zealand Exporters Fair was a stand displaying New Zealand Comb Honey.

Four companies: South Auckland Apiaries, Arataki Honey, Gavins Apiaries and Waitemata Honey in a joint venture displayed their various packs. The theme of the stand was 'New Zealand Comb Honey, naturally'.



In conjunction with these four companies, Haines Apiaries also ran a stand displaying packed honey, and honey and fruit spreads.

The response was initially very promising and although only one sale — to Hong Kong — was made, something over 50 new contacts of interested overseas buyers were achieved. These buyers were from America, the Middle East, Japan, Korea and every country in the Pacific. Those exhibiting now have a lot of work to do in following up the initial contacts.

The exhibitors, even if they make no new sales, benefited in that they found that several aspects of their packaging and presentation could do with a re-appraisal and up-date.

The stand, as pictured, was draped with red material and a mural-backdrop comprising a large 5' x 3' photo of a hand spreading comb honey set the theme.

The total effect was a refreshing and welcoming change from the professional "supermarket" approach employed by many of the other exhibitors. The compliments and praise from everyone who viewed were rewards in itself, although it is hoped not the only reward.

The biggest shock to some of the exhibitors was the reaction by

overseas buyers to the packaging used.

Said one: "We think the honey you are selling is nice enough, but with labels like the ones you're using, the product wouldn't even walk off the shelves."

In short, the reaction to labels and display package design was bad. This reaction, according to one exhibitor, focussed on the labels, rather than the packages themselves.

"Our packages — such as glass jars — are good. But there is no way we can expect to export using Lily cartons. They just won't stand up to the handling. They also won't take the four-colour printing that is required.

"Most of our firm's packages are in two or three colours. That's not good enough. They are going to have to be in four-colour if we are going to get any sort of buyer interest."

Exhibitors also came from the fair with the impression that exporters of NZ honey needed to visit their biggest potential markets overseas before even thinking of selling. New Zealand is so far away from the rest of the world, that buyers have to feel they are getting the best product available before they will go the trouble and expense to buy here. Best product does

not just mean the content of the package. It also means the appeal of the package itself, continuity of supply and all those factors which make up good marketing.

Of course, if you can't afford the trip, you won't be able to afford the colour photograph and printing costs which are big overheads for a small-scale exporter to bear. Photography and platemaking costs for 1000 jar labels are the same as they are for a million.

To quote another of the exhibitors: "Auckland is the centre of New Zealand when it comes to package design and marketing services. But even then, we are isolated from the rest of the world — the places where we want to sell. I can understand how isolated producer-packers must feel in other parts of the country."

Finding experts to assist is hard work. One Auckland-based honey exporter has found considerable help from Hally Print, another Auckland concern. Hally's experience in packing design is proving invaluable.

For those packers — like the one's at the export fair — who already have experience in exporting cut comb and section honey, the lessons learnt are all part of the complex game of competitive marketing. It's a world where old-fashioned "selling" doesn't merit a mention anymore. □

MAF snippets

APIARY SECTION RESTRUCTURED

The State Services Commission has approved the restructuring of the apiary section of the Ministry of Agriculture and Fisheries along the lines described in the March 1977 issue of "NZ Beekeeper". Two apiary instructors, — Vince Cook of Oamaru and Trevor Bryant of Gore — have been promoted to "Apicultural Advisory Officers" and three senior members of the section will be given the opportunity to qualify as apicultural advisory officers without the need to undertake the three year National Diploma in Apiculture. These three are Doug Briscoe, Bill Rodie and Colin Rope.

NEW NELSON APPOINTMENT

Andrew Matheson will shortly take up the position of apicultural advisory officer, Nelson, replacing Jack Varley who has recently retired. Mr Matheson recently completed a M.Sc. degree in entomology at Waikato University.

His thesis project involved a biological study of the passion vine hopper, *Scolypopa australis*, the culprit for the toxic honey found in the restricted beekeeping regions of the Bay of Plenty and Coromandel. His interests include tramping, photography, aviation and historical research. Mr Matheson has been receiving training in Hamilton and other New Zealand apiary districts under the supervision of Murray Reid. Mr Varley has kindly agreed to assist Mr Matheson with the Nelson district orientation.

PALMERSTON NORTH VACANCY

MAF has recently advertised the position of apicultural advisory officer, Palmerston North. The vacancy was created by the recent promotion of Graham Walton to chief advisory officer (apiculture). The appointee will share the southern North Island district with Bill Rodie. □ □



A "killer bee" destruction team at work at back hut on Hossick Station. In the foreground one of the kennels where station dogs were stung to death.

Killer bees at back hut

by Murray Reid

WE GET SOME pretty strange calls in our line of work, but this one took me back a bit.

I was sitting at my desk one day in the Christchurch office, just before I transferred to Hamilton, quietly minding my own business when the phone rang. It was the farm manager from Hossick Station.

"I've got a hive of killer bees in the roof of one of my mustering huts", he explained. "Oh yea", I thought to myself, "He has been reading about the Africanised bees in the papers".

But he did have some killer bees after all. It seems that two of his best dogs had been attacked and killed while chained up at the

mustering huts. The other five in the pack were last seen heading for a nearby stream to escape their tormenters.

I knew sheepdogs were expensive at over \$200 each. He had my sympathy there, but this mustering outpost was just that, an outpost at the top end of the station — a good day's horse ride away from the homestead. I knew the Hossick Station was at the back of Hanmer Springs and pretty isolated so I did some quick mental arithmetic. Christchurch to Hanmer Springs 130 km, say 1½ hours by car, then another 25 — 30 km into the Hossick homestead crossing a river four times in the process, then the rest of the day on horseback. I lost interest right there. Killer bees are one thing, horses another.

But he pleaded his case most eloquently; threw out the horses in favour of a Landrover and promised a bunk and a meal at the homestead after the bees were dealt with. I have been into many high country stations in my travels, but the Hossick (which shares a long border with Molesworth) was more isolated than most and could perhaps be kindly described as more pioneering than the others. I like a bit of adventure too.

John Smith, the apiary instructor in Christchurch, needed no second invitation. He had been into the Hossick before but just to the homestead. So off we went.

We met the manager in Hanmer Springs and off-loaded all our gear into a rather work-weary Land-

rover. He could not switch the motor off unless he parked on a hill as the battery was completely U.S. What a way to go I thought. I could see us stranded miles from anywhere in some stream-bed with a stalled motor and having to walk out.

One final check of the gear — smoker, insecticide gun, plastic bags (for the honey!), boots, caps and bata bullets. Then we were off. We travelled in by road, or what passes for roads in that country, for most of the way — some 51 km to the hut. We travelled on Molesworth Station for part of the way making our own path. Needless to say it was

bumpy, hot, dusty and noisy, and it took more than three hours to get there.

But the huts eventually came in sight and there were the bees working in and out of where the spouting should have been. As we had expected, they were very black. We got the gear off the truck and the manager went to find a hill to park it on. He seemed to take a long time to do this, but meanwhile the bees did not take long to find us.

John looked at me, I looked at him, we both looked at the kennels where the dogs had been stung to death, we both looked at the bees looking at us and we both had the same thought. "What the heck are we doing here?" Anyway we had come too far to turn back, so on with the gear.

We propped up some hay bales to get onto the roof then I, being John's controlling officer, decided he should go topside while I held the fort below.

As it turned out I had the worst job. The bees were no better, no worse than many swarms in buildings and we filled numerous plastic bags with honey. I was holding the bags up for John. He was supposed to put the comb in the bag but I think more went over me.

We scraped out all the wax, honey and bees, spread insecticide everywhere and cleaned up in the mountain stream. Lunch was washed down with genuine black billy tea including bits of ash and assorted debris. A quick read of the "literature" left by departing mustering gangs then we were off home.

This time we took a different route. "Only 20 km instead of 51 km this way", said the manager. "That'll do us", said John and I.

What he didn't tell us was that while the alternative route was shorter there were no roads. It was stream and river bed travel all the way; four wheel drive and low, low ratio. My spine will never be the same again. We literally bounced from boulder to boulder. Any wonder the

Landrover was not in show-room condition and any wonder the hut we had just left was called Back Hut.

I sweated every moment home thinking, "We have got to stall here", as we lifted our feet to let the water drain out. But we made it and it only took us 3½ hours to travel 20 km!

Back at the bunkhouse, we found the coal-fired boiler roaring away and lots of hot water for a shower. The beds and mattresses had seen better days but I like banana beds anyway. But more important our sleeping bags were warm and the literature was interesting to say the least.

That night John and I thought we would give the manager and his wife a treat. Fresh honey. We experienced all the dilemmas of hobbyist beekeepers trying to separate honey from wax, bees, and other stray foreign bodies. What a carry on.

Next day we decided to make a real feature of our visit and removed two more large swarms in the homestead itself along with more honey and wax. We left that in buckets for the manager and his wife to play with. There were still two more swarms in the bunkhouse and old cook house but we had had enough of bees by then, so resorted to insecticide instead.

So our adventure came to an end and we headed back to Hanmer Springs. By this time "we" were old hands at fording rivers and the Landrover did not miss a beat.

But what of the "killer bees"? There was no doubt they had killed the two dogs and severely stung the others. What we think had happened was that the colony in the roof had swarmed — there were recent swarm cells present and evidence of a brood break. We suspected that the swarm had settled near or even on the dogs. The dogs had become excited and tried to get away and either strangled themselves or were stung to death.

Hopefully no more swarms will move into the hut. It is a long way from help out there. □

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Kamo, Northland.

Waikato version of a paraffin wax dipper

by Murray Reid, Apicultural Advisory Officer, Hamilton
and Andrew Matheson, Apicultural Advisory Officer, Nelson.

BEES DON'T seem to mind a bit of dry rot in hive components or holes here and there; and judging by the number of dilapidated hives I see in my district, beekeepers don't either. At least until they come to shift the hives or find out how expensive woodware is to replace.

Every beekeeper has his own method of preserving woodware. Some rely on paint, creosote, wood oil, old engine or gear box oil, Metalex or paraffin wax or combinations of these.

Paraffin wax has many advantages once a dipper is made or purchased. Several beekeepers can share the cost of use of a dipper. The advantages include the cheapness of the treatment per unit, the wax really penetrates joints or any repaired sections, it cleans up propolis and old wax, and can be used to sterilize equipment salvaged from diseased colonies with the approval of the local apiary officer.

Two large push through wax dippers have been described in the NZ Journal of Agriculture, October 1964 and July 1968. Many beekeepers don't want or need such elaborate equipment.

For them a simple heated steel box is sufficient. There have been many improvements to this basic design made over the years. Mr Norman Finaly made one last year that works very well.

He constructed the unit from 3 mm plate steel. All the measurements are given in Fig. 1. The unit can hold two full-depth supers at a time, the boxes being lowered over the chimney. They are held under the wax by a couple of concrete blocks. Some sort of guillotine type lever is really needed here to hold the boxes down.

The space between the end walls and the fire box can be varied according to the size of floor board you use. Norman has 50 mm x 100 mm runners on his floor boards, then tacks small blocks of ground treated 50 mm x 50 mm fence battens to these.

So he needs at least 203 mm end space. He now regrets not having made both ends the same to accommodate his modified floorboards. The sides are designed to accommodate lids or excluders.

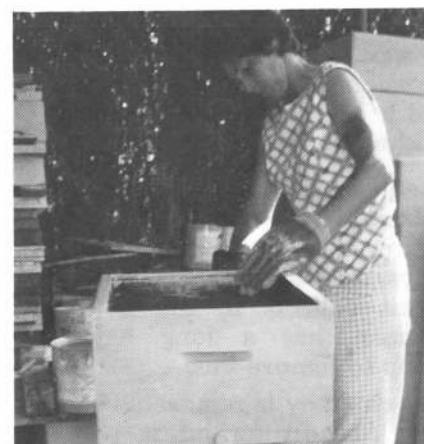
Other features to note are the draining channel leading to a



Norman Finlay, a commercial beekeeper at Ohaupo putting supers into his hot paraffin wax dipper. Two supers have been removed from the wax and are draining.



Two supers are held under the boiling wax by concrete blocks. The metal rod across the front of the picture is part of the bracing for the shed.



Norman's wife Ngaire, applies two coats of water based paint to the hot supers. The supers rotate on the painting stand.

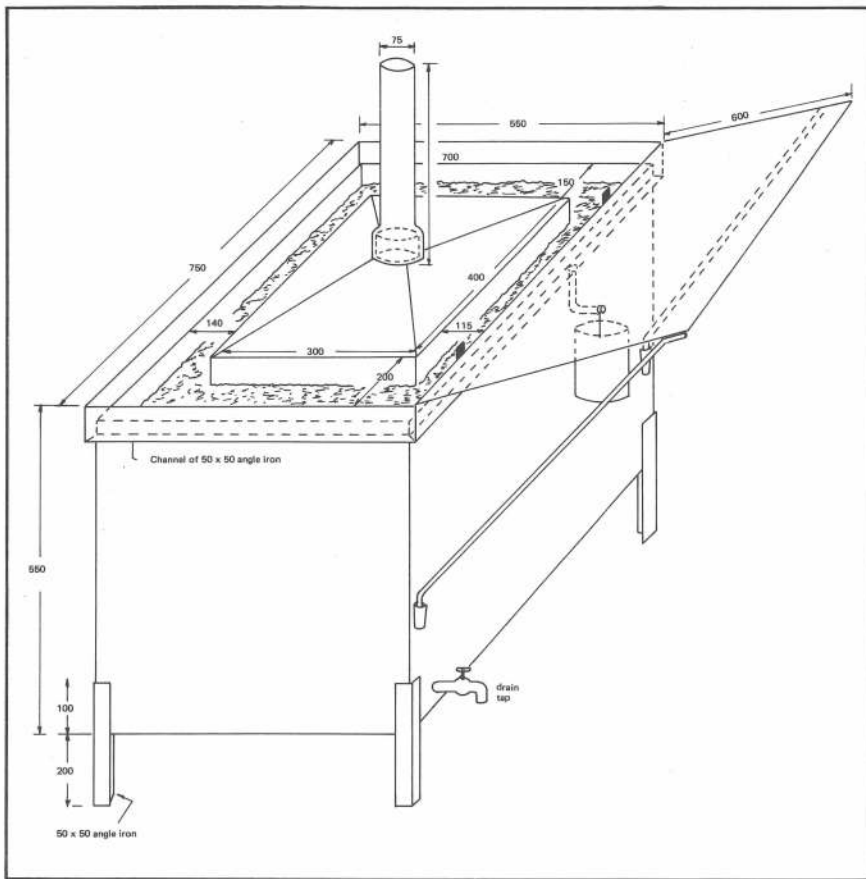


Fig. 1.

The dimensions (in millimetres) of the paraffin wax dipper. The drain plate and chimney are readily removable so that the lid (not shown) can go over the dipper to keep the rain out when not in use. The bottom is closed in on three sides with concrete blocks and earth to ensure a good draught for the fire.

drain tap. This catches any overflowing wax and also the wax off the draining plate. The central fire box is at least 25 mm above the level of the wax at its highest point. It also drains downwards.

This is to reduce the collection of wax around the chimney. The occasional fire still occurs here and a carbon dioxide fire extinguisher should be kept on hand.

There is a drain tap at the bottom of the fire box to empty the wax out should this be necessary. Quite an amount of debris collects in the bottom. Norman has a long handled scoop to remove this.

The chimney is removable and a flat, close-fitting lid is put in place to keep out rain water. Water and hot paraffin wax do not mix very well. The height of the chimney is a compromise between keeping smoke out of

the operators eyes and not having to lift the boxes too high to clear the chimney.

This unit with a central fire box takes about 3 packets of paraffin wax to fill. The wax costs around \$13 a packet. It takes 1½ hours to reach operating temperature. This is around 160°C. In practice enough heat is kept in the fire so that the wax really bubbles and boils up around the boxes when they are immersed, but not so hot that the wax boils over into the drain channels. Norman finds that 3-4 old frames per 2 boxes seems to be about right. It is best to keep a gentle fire going rather than fluctuate between hot coals and a roaring blaze.

The time spent in the wax is governed by the speed of the painters. If only one person is painting and dipping then the boxes get about 7 minutes in the wax. With two people

working then they get 4-5 minutes. If diseased boxes are being sterilised they need at least 10 minutes, and are usually done over "smoko" or lunch-time.

The boxes are lifted from the waxer onto the draining plate and are rested against two steel pegs to prevent them from sliding into the dipper. Two more boxes are placed in the wax. By this time the draining supers are free of surplus surface wax and are ready for a quick scrape to remove propolis and any flaking paint. Boxes previously painted with oil based paints will blister and need a good scrape. They now receive two quick coats of water-based paint. The paint goes on thick

and dries very quickly. It is pulled into the wood by the drying wax and a very good "fix" is obtained. The secret is to give the boxes long enough in the hot wax so the wood is heated right through and good penetration of the wax can be obtained.

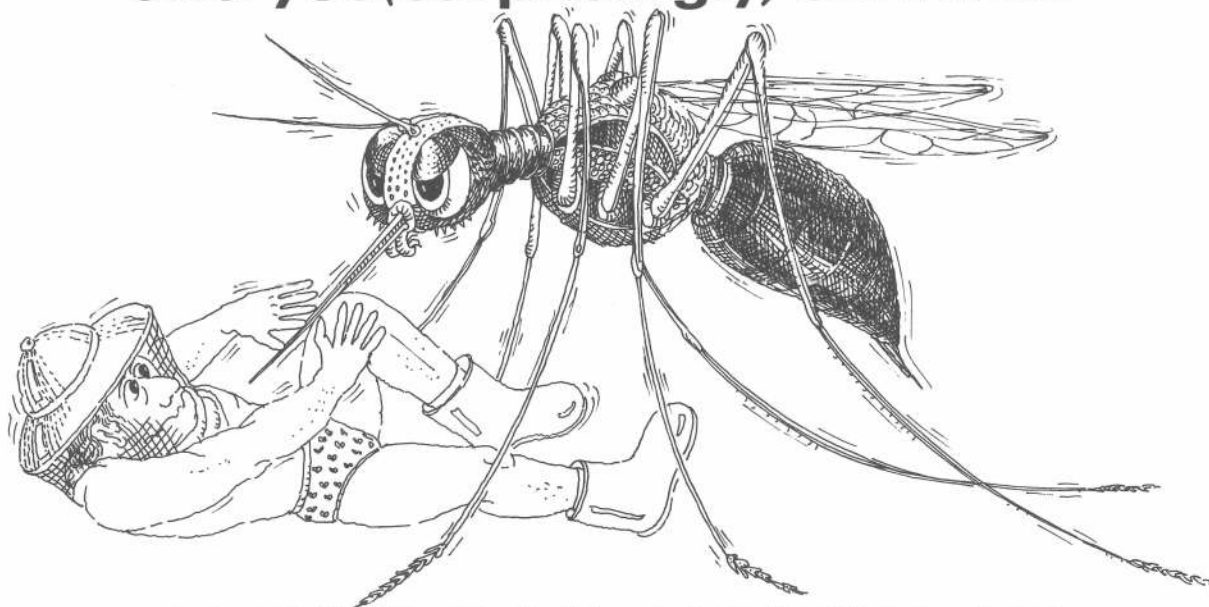
Some beekeepers do not paint after dipping. Paraffin wax is a good preservative on its own, but the paint is extra protection and gives the boxes a neat and tidy appearance.

All woodware should be as dry as possible as the wax tends to seal in any water in the timber. In this case the timber can rot from the inside out. Some beekeepers have found that waxing is not very efficient. I suspect that they are not giving their equipment long enough in wax that is sufficiently hot.

The boxes are very hot when they come out of the dipper and rubber gloves or tongs are needed. It helps to put a little cold water in the gloves before handling the boxes.

This unit cost Norman around \$60, but he made it himself from scrap steel he obtained at "mates rates". A similar unit recently built by an engineering firm from working drawings cost around \$300. All the joints were welded from both sides to reduce the risk of bursting when in use.

How a "cock-sure" Don Gibbons was taken unawares by the Far North and yet (surprisingly) survived



In June, 1977, following an invitation to live in the "Winterless North", Don Gibbons and family, accompanied by his right arm Gary Smith, arrived in Whangarei to manage the ex-Frank White business now owned by Gavin's Apiaries.

The business was to be called "Whiteline Queens" in tribute to Frank White, who had spent 30 or more years providing an ever-improving line of Italian Queens for the industry.

It was to be run as a separate business from Gavin's Apiaries so as to give customers the best possible service.

This article outlines Don's experiences to date.

KNOWING quite a lot about Queen breeding, or so I thought at that time, I considered the job was going to be "A piece of cake" and I arrived in Whangarei with visions of having to buy new clothes each month as I rapidly became more rotund. We wasted some Northland sunshine, some nice warm days through July and August, and we had some rain, though not enough to let us know what was still up there waiting.

In September we went about the serious business and then nature decided to let us know all about the "Winterless North". It began to rain and the rain was accompanied by southerlies. It was not very heavy tropical rain, but was the steady soaking variety which had us soaked through and frozen twice daily, day after day. But not to worry, we always get a few fine days round mid-September, or so the locals told me,

but last year these few fine days arrived a month behind schedule with the result that the end of September arrived with only one-third of the month's quota produced. During that period I suffered from the flu, toothache, infected socket, slipped disc and a painful cartilage. What a healthy climate we have in the winterless north!

Then the weather improved and things started to look up; but unfortunately many of my customers were late receiving their orders and of course some of them, especially those in the cold south, were in receipt of fine weather and were breaking their necks to get their queens. All I could do was to apologise, which I do once again.

What happened to "my piece of cake"?

We were so busy trying to fill our orders and fulfil our promises

that we had little time to worry about eating. I had heard that we lived only about an hour from the Tasman and a few minutes from the Pacific and as I was apparently too busy working from daylight to dark both came to see me in the form of rain, but minus the salt. Still salt is supposed to give a person hypertension. . . maybe that is why I always have a salt cellar in front of me everytime I sit down to a meal.

The second half of October and all of November and December went by smoothly and our Spring orders were finally delivered. Then Christmas arrived and we felt we had earned a rest for a couple of weeks and such rest would see us in good form for our Autumn run which we hoped would be less troublesome.

Then, on a pleasant outing in Whangarei harbour aboard the boss' boat all that changed.

"How would you blokes like to send queens to Iran?" Terry Gavin asked.

"Good indeed," I replied. But where do we get them from what with the numbers we have to supply to the home market in the Autumn?"

"Well, you work out what you need in the way of gear, we'll make it up at Titoki, and you can set them up," Terry said. "It's a piece of cake."

Not very convincing. I remembered what my last "piece of cake" was like.

But I said I'd be in it — a 50 per cent increase to make it all worthwhile and a couple of wonderful days to spent with two visitors from Iran. (This is where I made the discovery that Iran is no closer to the Equator than New Zealand and has a continental climate).

Then it was nose to the grindstone again in a hot summer with the bees so quiet that the only clothing needed was shoes and shorts.

But dare not fall for this, because in the Winterless North the mosquitoes are as large as Daddy-Long-Legs with probisci like elephants' trunks.

Anyway, I had fallen for the shoes and shorts trick and after two days was losing more blood than there is water in the Clutha. To add to the problem, it was growing time for kikuyu, a grass that grows so fast that it makes Jack's Beanstalk look like a slow mover. Kikuyu looks like gigantic couch, trips you when your arms are full and — worse still — pushes the lids off the mating hives. Frosts are severe on it, but in the winterless north the frosts don't arrive when they would be welcome.

Despite our setbacks, we managed to send 2 500 Queens to Iran and our first season of Queen rearing has been a success. Next season I will try to improve the areas which were not so good, such as delivery dates which should be met more successfully with our 50 per cent increase.

Now we are into the German wasp season and have already destroyed one nest which was about a metre across and fifteen normal ones. In March we fortunately received a visit from John Smith, MAF, Christchurch, and I must personally thank John for his trouble when in overcrowded and underventilated circumstances he showed us

something of Poland, their trees for bees programme, and demonstrated artificial insemination.

We have not started artificial insemination as yet, but we are investigating the possibility as well as being in a position to check nosema. At this stage I don't know whether to thank or abuse John for introducing us to the "Maggy Lamp" because before we bought it I was close to needing assistance for eye strain but now I think I need it for arm strain as the larvae appear so much bigger. Sorry to keep your head off the pillow so long when you were here, John, but we don't get those opportunities every day.

As regards AI weather conditions, and I wonder whether it would be worthwhile trying to produce a mutation, like say a drake-bee cross. I suppose I would finish up with a flower-loving duck or a Queen which laid one egg a day and wanted to sink the Armada.

If you think the writer is crazy I can only say that it was a prerequisite of the appointment.

Thanks to customers, new and old, for your cooperation and patience. Next season will be "A piece of cake". □

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HMA NOTES

HIVE LEVY

The last day of payment for Hive Levy set out in the regulations was March 31. As from April 1, a 10 per cent penalty is incurred, and a notice to this effect has been posted out by Registered letter to all hive owners who at the end of March were still unfinancial.

CONTAINERS

A letter has been circulated concerning containers which have, within the last three years, apparently been "lost" from circulation.

200 litre (44 gallon) drums and 20 litre (5 gallons) cans this year cost the Authority \$116,345.65. In addition, freight paid by the authority to supply drums and cans at the beginning of the season to producers cost a further \$39,037.30.

The HMA will thus invoice all persons and/or companies who are in possession of Honey Marketing Authority drums and cans at the end of this season, and who have not supplied the authority with honey. The cost will be:-

Drums	\$17.50 each
Cans	\$ 2.50 each

these costs being replacement value.

It is also proposed to circulate a container declaration form in which there will be provision to detail any transfer or sales of containers.

PRODUCTION AND INTAKE

Intake to date is about 1 864 tonnes, which is leading up to a record, providing the usual pattern of supply follows. All areas of the country are fairly well represented. Quality and colour are also favourable.

UPGRADING PLEASANT POINT & AUCKLAND PLANTS

As many producers are aware, the Health Department are taking a greater interest in honey packing plants and the authority is no exception. The Auckland plant is in the process of re-organisation in an effort to meet requirements to bring it up to standard, and at the same time some modifications to the operation and set up of the plant are being made.

Pleasant Point also requires major work to be done. The board has approved an immediate drawing up and pricing of plans and specifications for the rebuilding of Pleasant Point. It is intended the building will be located on the same site and the plant updated to handle 200 litre containers which it now does under extreme difficulty.

HONEY GRADING

Suppliers will be aware that there has been some delay in grading. This has been partly due to an above average intake. However, there have been some problems over the whole field of grading and discussions with the ministry have led to a fuller and clearer understanding of each other's problems and it is hoped that the situation will be resolved.

The board of the HMA discussed the criteria in which the advanced payment is made, and it is likely next season that this payment may not be subject to the honey being graded first, thereby allowing faster payment to suppliers.

LOCAL MARKET

As a logical development of high production, one can expect high stock levels, and it is in this situation that producer/packers and other suppliers to the New Zealand wholesale and retail grocery trade can expect pressure to reduce prices or discount parcels. Producer/packers are earnestly urged to maintain prices, for not only will discounts in whatever form influence profitability for this year, a precedent may be set that could influence next season and future season's payouts.

We have been working hard to establish acceptable and viable retail price levels. It would be a backward step indeed if producer/packers' margins are repressed.

WORLD MARKET REPORT

Compiled by the editor from overseas and local sources.

WITH UNSOLD wholesale stocks of honey at a low level in most parts of the United States and Canada, sales in the last two months have been slow. Nevertheless, those sales which have been made are on average up 2½ cents a pound to the producer, compared with the year before.

Retail prices in both the United States and Canada are also firm.

In the longer term, market prospects in the United States are good with winter losses in many states up between 5 and 20 per cent on normal. Reports say prospects of an expansion in U.S. hive numbers are thus unlikely.

The South American crop is of uncertain size, with the Argentine crop below average and the Chile crop as much as 20 per cent above last year. Mexican stocks are thought to be reasonably high.

In most of the major Southern Hemisphere exporting nations there are reports that stocks are currently proving to be difficult to move. New Zealand, Australian and Argentine exporters are all reported to be holding firm to their prices in the hope of more movement coming into the market in the months ahead.

Reports in the May issue of the Ameri-

can Bee Journal state that offers from importing countries have not been up to expectations at this stage — a view echoed by the HMA in its latest newsletter, along with suggestions that the authority may approach the government for extra finance to hold stocks until an expected improvement in prices.

The American Bee Journal also reports that the shipping cost from NZ is so high that some reporters feel buyers might be looking elsewhere first.



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Reply: J Cox, P.O. Box 1389,
Wellington. Phone 727-127.

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Up to 50 hives, any condition considered, write T. King, Wainui, R.D., or phone 51A, Kaukapakapa.

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Replies to Box 176, Carterton.

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, MAF, Private Bag, Palmerston North. 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 0NR, England.

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by R.S. Walsh

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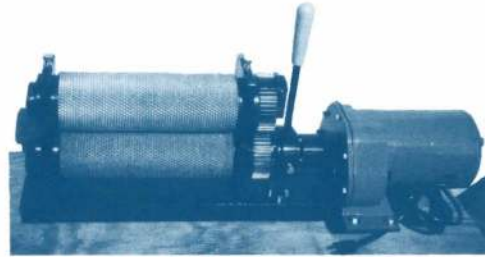
If you are interested in becoming a member please contact the Secretary, Bonni Wilde, P.O. Box 2134, Rotorua.

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