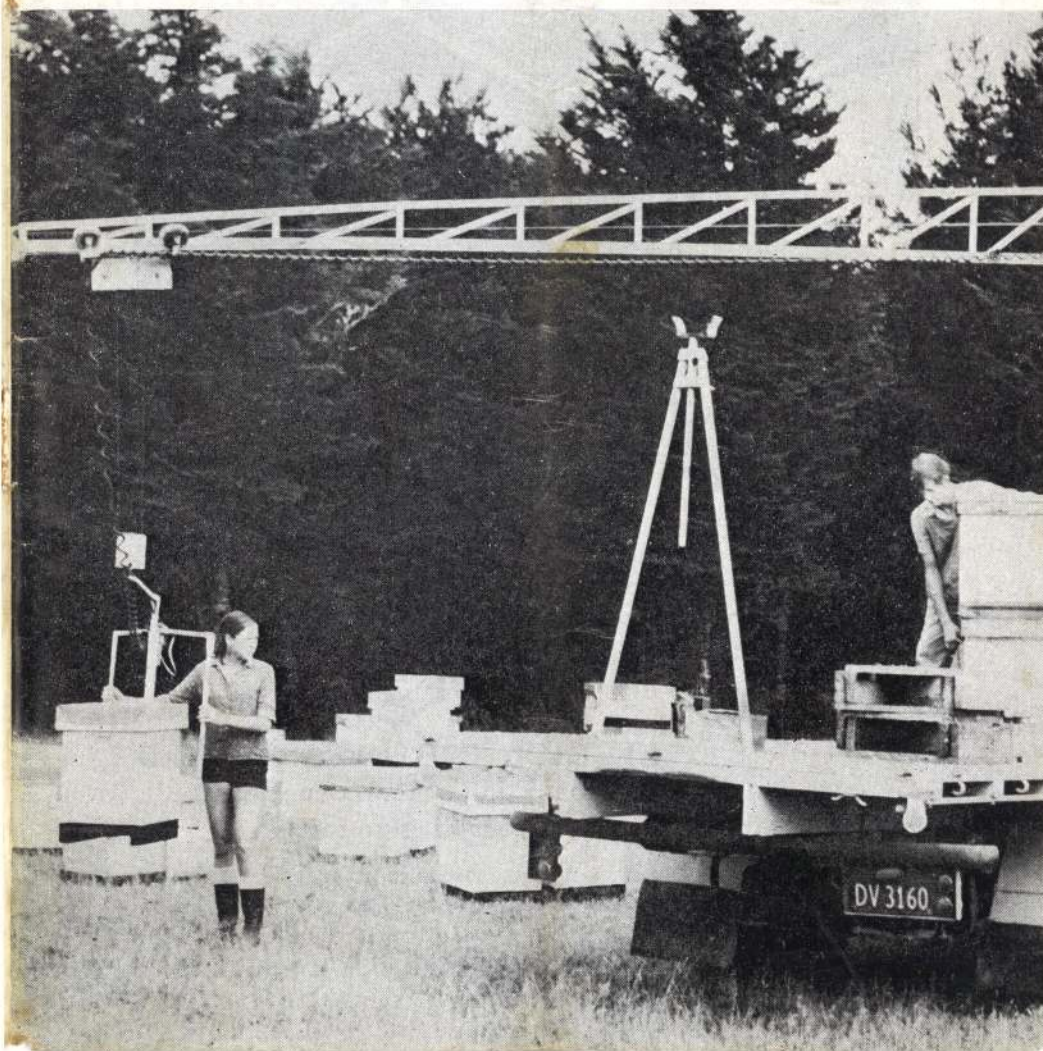


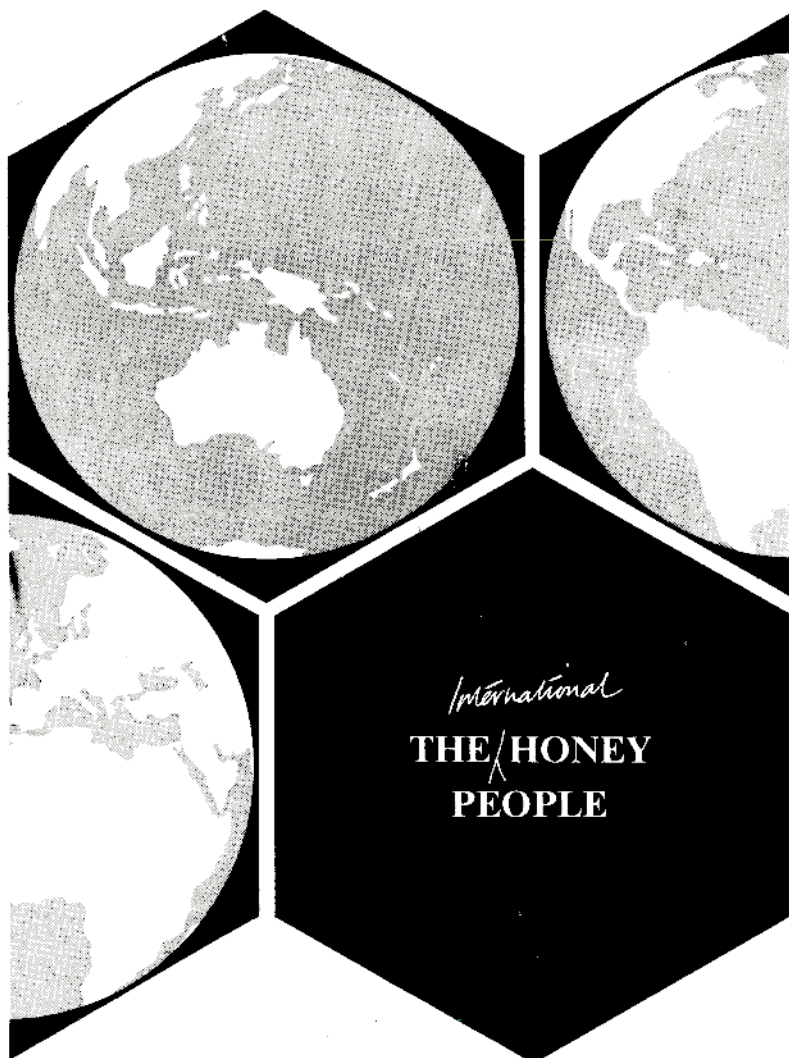
THE
NEW
ZEALAND

BEEKEEPER

February 1974

Higher H.M.A. Payout Authorised





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**THE
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FEBRUARY, 1974

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The State of the Industry

In spite of a below-average season's production because of drought in many areas, I see a glimmer of light in several sectors of the industry. Those producers who had a good flow in areas of ample rainfall or before the onset of the drought in others are fortunate indeed.

The industry as a whole is fortunate also in that the Government has passed the nightmare phase with its harsh control of prices both wholesale, retail and payment to producers. To my way of thinking, the new price structure is an improvement on any cost-of-production-based-payment because it is directly related to overseas realisations. It is an unfortunate fact of life that statistics can be made to prove anything according to their interpretation.

As we enter a period of consolidation in the industry following the frustration of last year's price problem, the stage is being set for the resolving of the Levy. Is it too much to hope for sanity here also? Or will the frustration and inaction of recent years continue?

Developments on the world political scene can have significance for honey producers in far away New Zealand. Britain's entry into the E.E.C. will ultimately mean a levy of 27% on honey imported into Britain. But duty on honey from E.E.C. sources will at the same time reach zero.

We are fortunate indeed that none of the E.E.C. countries are major honey exporters. But the air of uncertainty surrounding the final arrangements for Britain's actual entry will not help anyone.

Neither will the oil/energy crisis help. But there is a growing body of opinion which says that relativities will be gradually restored as other commodity prices come into line with oil prices. Perhaps in a few years we will effectively be back to square one again.

HMA Authorised Payout

The circular printed below together with letter from Mr Barclay, Parliamentary Under-Secretary to the Minister of Agriculture and Fisheries sets out the position clearly. My only comment is: If this is a fair, just and equitable basis for payout this season then it just makes last season's figures that much more ridiculous, as the overseas realisations situation is not that much different now from what it was twelve months ago.

It is unfortunate that the public and some people who should know better have so little understanding of the situation. I have had occasion to reply to a columnist writing in one of Auckland's suburban newspapers who said, "Honey is going up in price shortly. The beekeepers have been promised an extra 3½c a pound for their product by the Honey Marketing Authority . . ." My reply says, inter alia, "It would be more correct to say that the Government has decided to allow the H.M.A. to pay the beekeepers more of the realisation from the sale of their own produce which is their just right . . ."

Overseas Subscriptions

Fluctuating international exchange rates have made it very difficult for realisation from the published subscription rates to be accurate. At one time recently we were getting \$1.60 for \$2U.S. and \$2.65US used to be worth \$2NZ. Now we get about \$1.60 for £1U.K. which used to produce \$2NZ. May we respectfully suggest that our overseas friends check with their bank or whatever to see that the amount they are sending will produce \$2NZ when it gets to New Zealand. Recent postage increases have been absorbed so that we need at least a full \$2NZ to make these subscriptions economic.

OFFICIAL LETTERS ABOUT NEW LEVEL OF HMA PAYOUT

From B. G. Barclay, Parliamentary Under-Secretary to the
Minister of Agriculture and Fisheries, to R. F. Poole, Chair-
man of the N.Z. Honey Marketing Authority.

15th January, 1974

Dear Mr Poole,

I refer to our meeting on December 19 and to my request that you and Mr Dickinson should have a further discussion with the Ministry with a view to reaching agreement on a formula for determining the level of the payout to be made by the Authority for honey supplied to it during the 1973/74 season.

I am informed that as a result of this discussion agreement was reached on the following basis, subject to my concurrence:

1. Base price agreed upon — 23.5 cents per lb = 51.8175 cents per kg
rounded off to 52 cents per kg
2. This base price to be—
 - (a) The price conveyed to the Minister of Trade and Industry with the suggestion that the Price Tribunal might have regard to this in considering applications for local price adjustments.
 - (b) The "guaranteed minimum" average payout for honey supplied to the Authority for the 1973/74 season.
3. Final payout (including advance payments) would average 52 cents if nett overall realisations from all operations are 52 cents or less. Early incentive and "water white" bonus payments would be deducted to arrive at the nett realisation.
4. If realisations average less than 52 cents the difference required to pay out an average of 52 cents will be drawn from the Authority's reserves.
5. If realisations exceed 52 cents the payout may be increased as follows:—
 - (a) Where realisations average 54 cents or less, an additional payout may be made of 75% of the amount by which the realisations exceed 52 cents.
 - (b) Where realisations average 56 cents or less, an additional payout may be made of 1.5 cents per kg plus 50% of the amount by which the realisations exceed 54 cents.
 - (c) Where realisations average 58 cents or less, an additional payout may be made of 2.5 cents per kg plus 25% of the amount by which the realisations exceed 56 cents.
6. On the above basis, the maximum average payout will be 55 cents per kg, and this will be payable only if realisations reach 58 cents or more.
7. From the point of realisations exceeding the base price, appropriations will be made to the Authority's reserves at a progressively increasing rate. Any realisations in excess of 58 cents will be appropriated entirely to reserves.
8. Early delivery incentive and water white bonus payments as set in the Authority's Conditions of Supply will be payable as agreed, in addition to the payout agreed upon as above.

I approve the proposal outlined above, and direct, pursuant to section 17 of the Primary Products Marketing Act 1953, that the Authority shall determine

its payout for honey supplied to it during 1973/74 on these principles.

I suggest also that the same principles could be applied by the Authority in determining the payout in subsequent years, with the provision that the base price would be reviewed annually but that it would be amended only if there were seen to be justification for a variation of not less than 2 cents per kilogram upward or downward.

Yours sincerely,

B. G. BARCLAY,
Parliamentary Under-Secretary to the
Minister of Agriculture and Fisheries.

Circular from R. F. Poole, Chairman of N.Z.H.M.A. to
all Honey Producers.

NEW ZEALAND HONEY MARKETING AUTHORITY
P.O. BOX 2615
AUCKLAND

16th January, 1974

To All Producers.

I am pleased to inform you that I have now been advised by Mr Barclay, Parliamentary Under-Secretary to the Minister of Agriculture and Fisheries, of the result of the representations made on your behalf by Mr Ivan Dickinson, President, N.B.A., and myself, to determine the level of the payout to be made by the Authority for honey supplied to it during the 1973/74 season.

Attached is a copy of the letter from Mr Barclay setting out all the details.

It is to be noted that the minimum average payout has been increased from 20 cents per lb to 23½ cents per lb (44 cents per kg to 52 cents per kg) an increase of 17½%. On the same basis as last year, an average of 23½ cents per lb would yield approximately 25 cents per lb honey grading 100 points. The early delivery bonus of 1 cent per kg, and the premium bonus of 1½ cents per kg for honey with a colour grading of 0-9 mm, will be additional to this amount.

Your attention is drawn to the provisions providing for additional payments if the nett overall realisation are greater than 52 cents per kg.

It is appreciated that suppliers have been waiting until the Minister's decision has been made known. Now that you know, please send your honey promptly to take advantage of the early delivery bonus.

The more honey that the Authority receives, the greater the throughput, and the more chance for an increased payout!

I wish you a successful season and bumper crops.

R. F. POOLE,
Chairman.

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Executive Meeting in Wellington

11th-12th December, 1973

Minutes of a meeting of the Executive of the National Beekeepers' Association of New Zealand (Inc.) held in the Druids Club Rooms, 4th Floor, Druids Chambers, Wellington on Tuesday, 11th December, 1973, commencing at 11.12 a.m. and carrying through until Wednesday, 12th December, 1973.

PRESENT:

Mr I. J. Dickinson (in the Chair). Messrs M. D. Cloake, M. D. Haines, J. D. Lorimer, D. Penrose, J. De Wit.

In attendance: E. R. Neal, Association Secretary, N. Stanton, Editor of "The New Zealand Beekeeper".

WELCOME:

Mr Dickinson welcomed members of the executive. He said the Association had been involved in a number of serious matters and there was a grave situation in regard to:

- (a) The levy proposals and
- (b) The limit of payout.

He thought the executive must show strength and confidence, both in itself and to outside bodies.

MINUTES OF PREVIOUS MEETING:

Mr Cloake suggested an amendment on the last page regarding the Health Department. "Packing Houses" should read "extraction houses".

On the motion of Mr Penrose and seconded Mr Cloake it was resolved that the minutes of the 10, 11, and 12 September as previously circulated, and as amended above, be confirmed as being a true and correct record of the proceedings.

The Secretary then read three sets of confidential minutes which had been taken "in committee" and for which only two copies had been produced, one for the President and one copy pasted in the minute book.

On the motion of Mr Haines, seconded Mr Lorimer it was resolved that the three sets of "in committee" minutes taken on the 10, 11, and 12 September meeting and as read by the Secretary be confirmed as being a true and correct record of proceedings.

MATTERS ARISING OUT OF MINUTES:

(1) Survey of Wages: The Secretary reported that he had been unable to commence this exercise.

(2) Dale and correspondence to the Ministers: Mr Dickinson said Mr Dale had intended writing to the Secretary regarding any embarrassments that might have been caused. The Secretary reported that no such correspondence had been received.

(3) Honey Mead: The Secretary reported on phone calls he had had with Mr Havill and Mr Nolsen, and information he had passed from one to another regarding Health Department authority to make mead.

(4) October meeting with the H.M.A.: Mr Dickinson reported that only he had attended and not two representatives as originally envisaged.

LIMITED PAYOUT:

Mr Dickinson reported that the previous day he had had an hour and a quarter's meeting with the Minister. He had to report that discussions were not concluded and there would be another meeting next Wednesday, 19th December, 1973 at 11.00 a.m. Mr Dickinson said he had left home on Sunday and conferred with the Chairman of the H.M.A. on the Sunday evening at Christchurch, discussing the situation with him fully. He had had every co-operation from the Chairman of the H.M.A. with regard to information on finance, market trends. According to the H.M.A. there was every indication that the realisations would be down 10-15%. This would represent a drop in the 1973/74 realisations compared with those for 1972/73. Factors taken into consideration in assessing this allowed for re-valuation of the New Zealand dollar, the fact that Japan had stockpiles of honey to last at least until April 1974, the fact that general trends for the honey market tended to level out and the situation regarding oil shortages and the effect this would have on shipping and on production.

The Chairman of the H.M.A. and Mr Dickinson had considered all aspects they would discuss with Mr Barclay. Mr Dickinson had thought that the things which would loom large in Mr Barclay's mind would be the effect on the consumer and the effect on the packers if all of the realisations were paid out. In the event, at the meeting safeguards for the consumer and the packer were to the forefront of Mr Barclay's mind. One suggestion originating from Mr Dickinson and Mr Poole was that perhaps a "base price" be set which would give the H.M.A. a certain amount of autonomy with which to dispose of realisations over this base price. Mr Barclay seemed receptive to this suggestion. It was also suggested to Mr Barclay that 25 cents could perhaps be the base price for 1973/74 and Mr Barclay said 10-15% off previous realisations of 28 cents was pretty close. Mr Barclay had wondered whether 23 cents should be the first base price. In any case he was very interested in the concept of a base price. It would seem that with a base price, the supplier would know what was to happen. It was also suggested that half of the difference between the base price and the realisation be paid to the supplier as an extra and the other half be put to reserves. Mr Barclay seemed to like this scheme also. If however the realisations were below the base price and reserves had to be utilised to bolster up the payout then the next year, the base price might have to be lowered. However, it was hoped that next year a cost of production scheme would be in operation and information from it would help regulate the base price. One great advantage to the suppliers would be that they would have an "early warning system" of price fluctuations. Mr Dickinson said he would recommend later to the executive that 24 cents be the base price.

On the motion of Mr Penrose, seconded Mr De Wit it was **resolved** that the executive of the N.B.A. ratify Mr Dickinson's negotiations with Mr Barclay and the Honey Marketing Authority to date regarding the payout and that on the 19th December 1973 Mr Dickinson promote the concept of a "base average price" and also a concept of the Honey Marketing Authority having power to pay out at least half of the surplus of realisations over the base average price to the suppliers.

After further discussion on the payout, on the motion of Mr Penrose, seconded Mr Haines it was **resolved** that the National Executive of the N.B.A. recommend that the base average price payout be 24 cents. Mr Lorimer raised the question of the amounts put to reserve going to the credit of individual suppliers. This was taken up later in the meeting, since at this stage, Mr Watt and Mr E. W. Lee arrived.

COST OF PRODUCTION SURVEY:

Mr Dickinson welcomed Mr J. Watt from the Ministry and Mr E. W. Lee from the Ministry. He said it was good to have the association with the Ministry especially in respect of the advice and assistance the Association hoped to get in connection with the mounting of Cost of Production Surveys as these had a bearing on so much of the industry's welfare. Mr Watt said in general

the Ministry had abandoned Cost of Production Surveys in favour of market trend surveys. Mr Watt said he had people in his Ministry who he was sure could assist the N.B.A. conduct a Cost of Production Survey. There was a long discussion with Mr Watt and Mr Lee with members of the executive asking various questions. Mr Watt said there was a Mr Smith in the Ministry at Christchurch who would help construct a scientifically designed Cost of Production procedure, and that the N.B.A. should make contact with him as he has the authority to assist where ever he can.

RESEARCH TOPICS:

Mr Penrose said that there were often research topics which came up. Mr Penrose asked whether Mr Watt would consider it impertinent if the N.B.A. suggested lines of approach, especially when commercial bee operators had done some work towards this research. Mr Watt replied that his Ministry would welcome it. Mr Lorimer then quoted the example of Mr Palmer-Jones undertaking some research in regard to the feeding of sugar to bees and using A1 sugar only instead of doing trials on both A1 and raw sugar at the same time.

METRICATION:

Mr Watt said that he thought there would be a meeting of Apiary Instructors about the middle of next year. He wondered whether perhaps the N.B.A. should advise the Ministry when the executive were next to discuss metrics and invite some Ministry people along.

PAYOUT:

Reverting to Mr Lorimer's question, Mr Lorimer said he understood it was an accounting possibility to have individual credits to suppliers, but he would not like this line pursued if it would have any detrimental effect on Mr Dickinson's negotiations for next week.

LEVY SCHEME:

Mr Dickinson elaborated on the memo to executive in which he had covered his October meeting with the H.M.A.

Mr Cloake moved that a delegation from this meeting be empowered to act on levies as they think fit. This lapsed for want of a seconder. Mr Lorimer moved and Mr Cloake seconded a motion that this executive obtain a legal opinion as to whether, in his opinion, the Association's solicitor regards the Nelson scheme on levies as being capable of being enforced.

This was lost.

On the motion of Mr Dickinson seconded Mr Haines it was resolved that the Association's representatives at the meeting in Christchurch pursue the wishes of the Nelson Conference re the levy scheme.

On the motion of Mr Haines seconded Mr Clarke it was resolved that Mr Dickinson and Mr Penrose be representatives at the Christchurch meeting with the H.M.A. and Packers' Association re the levy scheme.

COST OF PRODUCTION:

On the motion of Mr Haines seconded Mr Lorimer it was resolved that Mr D. Penrose call on Mr Alex Smith of the Christchurch office of the Ministry of Agriculture and Fisheries re the mounting of a Cost of Production Survey and report to executive from time to time.

LOANS FROM STATE ADVANCES:

The Secretary reported that he had deferred visiting the State Advances Corporation in view of the intention of the H.M.A. to lend money to beekeepers. However, when it was pointed out that this was not yet incorporated in the H.M.A. regulations it was agreed that the Secretary call upon State Advances as soon as possible.

WAGE SURVEY:

It was agreed that this now be incorporated in the Cost of Production Survey.

TAX INCENTIVES:

Mr Dickinson and the Secretary reported on circulars they had received from Trade and Industry saying that a committee had been set up in regard to tax incentives and submissions were needed by the 30th November 1973. The Secretary reported that he had had a telephone call from Trade and Industry pointing out that the N.B.A. had not been approached when the original announcement was made owing to an oversight by the Department. The officer from the Department had told the Secretary that an extension of time would be allowed. In discussion it emerged that the following categories of beekeeping could be involved:

- Export of Queen Bees,
- Export of Packaged Bees,
- Export of Comb Honey,
- Export of Honey Dew.

It also emerged that the following individuals would be interested:—

- Bray and Gossett,
- Haines & Co.,
- Dudley Ward,
- Arataki Honey.

It was agreed that copies of the letter from Mr Walding, the Minister of Overseas Trade, together with guide lines regarding submissions be circulated to the Chairman of the following organisations:—

- Queen Bees — Mr Bray,
- Packaged Bees — Mr Haines.
- Comb Honey — Mr Blair.
- Honey Dew — Mr Cattermole.

as well as the individuals mentioned above. So that each would know who else had got the letter it was agreed that the circulation list be printed on all letters.

Executive agreed that all concerned be advised that the N.B.A. would give general and overall support but would like a feed-back of the individual submissions by the 15th January 1974 since this would be in the respondents' own interests.

BRASS PUMPS IN HONEY HOUSES:

Mr Lorimer raised the question of whether these had any deleterious effects on honey. It was agreed the Secretary ask Mr Watt of the Ministry for a report on whether brass had any deterrent effect on honey.

METRICATION:

(a) Beekeeping equipment: In view of what Mr Watt had reported, on the motion of Mr Penrose seconded Mr Haines it was **resolved** that the N.B.A. ask Mr Watt to the March meeting of executive, together with the North and South Island Advisory Officers in order to discuss metrics in beekeeping equipment.

(b) Containers: It appeared from letters received from: (1) F. M. Winstone and (2) H.M.A. that a decision had been taken. Mr Dickinson reported that the Packers' Association had advised that they had fallen in line with the H.M.A. suggestions.

On the motion of Mr Penrose seconded Mr Dickinson it was **resolved** that the Secretary write to the Metric Advisory Board saying that the weights agreed by the H.M.A., the Container Manufacturers, the Packers' Association and the N.B.A. were 250 grams, 500 grams, 900 grams and 2 kilograms.

BRANCH ACCOUNTING:

The Secretary reported that he had had to remind Branch Secretaries again that they should return receipt books to him and send all subscriptions received by them without deduction to him as General Secretary. He said that some little confusion was arising on account of some Branch Secretaries not adhering to the instructions.

FEDERATED FARMERS:

There is a Council meeting on the 13th and 14th February 1974. Mr Lorimer said he did not like the idea of the President sitting through two or three days of the Council meeting if there was only an hour's business relevant to the industry.

On the motion of Mr Cloake seconded Mr Lorimer it was **resolved** that the the President or his Deputy attend section meetings of Federated Farmers.

On the motion of Mr Cloake seconded Mr Lorimer it was **resolved** that the President for the time being or his nominee be the duly elected representative for the National Beekeepers' Association on the Federated Farmers Agricultural produce section in place of Mr Winslade.

SUB-COMMITTEE AND COMPOSITION OF EXECUTIVE:

Mr Penrose said it appeared that each sub-committee wanted representatives around the executive table. He wondered whether at the Annual General Meeting a rule change should be proposed providing for a President, a vice-President, one member from each Island and then one member from the Packers' Association, the Comb Honey Producers' Association and the Queen Breeders' Association and the Honey Dew Producers' Association. There was a very long discussion which the President described as being very fruitful.

Mr Dickinson moved and Mr Cloake seconded a **motion** that this executive do **not** consider that the time is opportune for the formation of sub-committees with a direct representation on this executive.

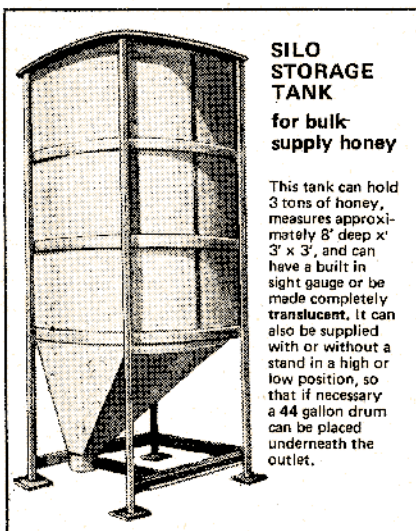
Mr Penrose said he would have to speak against this; if it succeeded the N.B.A. would be burning its bridges behind it. The way the Government was going the Industry must have unity. If the resolution succeeded the Industry would be in dire trouble. If it failed it would strengthen the N.B.A. by about 100%. Mr De Wit said there were too many splinter groups knocking on Government doors. The Industry should have one voice. Mr Lorimer said the principle was one of direct representation — the sub sections did not concern him. Sub sections within Branches would be better still, and would be entirely different to re-structuring the entire Body. The central issue was direct representation. Meetings throughout the country provided ample opportunity for this. Sectional interests could use the N.B.A. to advantage by attending meetings. All had the machinery for this purpose. They could make it their business if they placed their problems before their branches. Mr Haines said he would oppose the motion. Whilst the machinery was inadequate the Packers and the Queen Breeders' Group were spread throughout the country. There might only be one in each branch; if sections had their own meetings they could formulate their own remits etc. This must benefit the industry if kept in right context and so long as producers could not be out voted.

Mr Cloake said he would oppose on the grounds of representation. He agreed on the sub-committees however. He said the sub-sections had access to the executive now. Past executives had had people who had had these various industry backgrounds. He thought also that the move would do nothing to stop unauthorised representation to Government. Some "knockers on doors" had been executive members. He wondered whether the Minister took more notice of these people than executive were led to believe. Forming an Association to stop this would just not work. At the present time the N.B.A. had strength to handle these problems. He said he would be prepared to handle the proposition in say, a year's time.

He posed the question if a Queen Breeders' Group was allowed to be formed, why not allow South Canterbury Honey Producers' Group or a Kamahi Producers' Group or a Clover Honey Producers' Group. Mr Dickinson said he considered the time was opportune and recommendations should be put to conference. He had strong reservations on the representation for ten or twelve persons, however. Nevertheless he did feel that there was a strong need to have available at executive level, representations from the stronger sub interests. If executive had this representation there was a strong possibility the sub sections

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P.O. Box 12,069, Penrose, Auckland, Phone 596.617.

would prove to be unnecessary. He thought it was the time to think seriously and make recommendations to the forthcoming conference. Mr Dickinson had found it most difficult, as he said in his memo, to get up-to-date information. On two or three occasions he had received information regarding what a certain organisation was doing. He wondered why he had not heard earlier. Two cases in point were metrication and the M.R.P. When the motion was put, there were two for and four against and the motion was therefore lost.

Mr Penrose moved and Mr Haines seconded a motion that it be an executive remit to conference that rule 18 (a) be altered to read in line 2, nine (9) instead of six (6); line 2, two instead of one; in line 3, six instead of four; in line 3, one instead of two and in rule 18 (b) in line 1, nine instead of six and in rule 18 (a) and the words "and one from each of the Queen Breeders, Honey Packers, Comb Honey Producers, Honey Dew Producers, sub-committees of the Association", be added; and in rule 18 (b) adding the words "Taking each Island and each of the Queen Breeders, Honey Packers, Comb Honey Producers, Honey Dew Producers elections as separate elections and that at least two persons shall be nominated for the Queen Breeders, Honey Packers, Comb Honey Producers, and Honey Dew Producers sub-committee of the Association".

Mr Dickinson moved and Mr De Wit seconded an amendment that the words "one from each Island" be added after the words "vice-presidents". When the amendment was put it was carried.

When the substantive motion was put it was carried.

Messrs Cloake and Lorimer asked for their dissenting votes to be recorded. Mr Penrose then reported on the formation of a Honey Dew Producers' Association.

PETROL RESTRICTIONS:

On the motion of Mr Penrose seconded Mr Haines it was resolved that the Secretary write to the Ministry of Transport with a copy to the Federated Farmers pointing out the position held by the Beekeeping Industry as primary industry and the way in which they depended upon petroleum products for their livelihood and seeking for consideration in the event of any restriction on petroleum products.

BOILER INSPECTION:

Mr De Wit pointed out that generally beekeepers used their boilers for approximately 42 days per year. They are required to have the boiler inspected annually at present. On the motion of Mr De Wit seconded Mr Lorimer it was resolved that the Ministry of Transport and Marine Section be asked to amend the regulations so that beekeepers' boilers be inspected every two years instead of annually.

HEAVY TRAFFIC WAYBILLS:

Mr Cloake pointed out that the Traffic Officers seemed to expect Heavy Traffic Waybills when beekeepers were carting their own bees. It appeared that farmers were required to carry a heavy traffic waybill if carrying over 5½ tons. On the motion of Mr Dickinson seconded Mr De Wit it was resolved that the Secretary write to the Ministry of Transport seeking clarification on the regulations re firstly, heavy traffic waybills and secondly goods licences in relation to apiarists.

AGRICULTURAL CHEMICALS:

Mr Lorimer said that Waikato Branch felt that submissions should be made to the Minister in connection with the proposed new regulations regarding the constitution of the Agricultural Chemicals Board.

On the motion of Mr Penrose seconded Mr Lorimer it was resolved that Mr J. Fraser be appointed as the representative to fellow Mr Pearson on the Agricultural Chemicals Board and copies of the letters from Mr Moyle sent to Mr J. Fraser for study.

BOOM LOADERS:

It appeared that the maximum allowed was 12 foot from the centre of the back axle.

On the motion of Mr Lorimer seconded Mr Haines it was **resolved** that the Secretary write to the Ministry of Transport regarding overlength booms to see if the Ministry will allow dispensation in individual cases. It was noted that Mr Lorimer would send details to the Secretary in this respect.

CANADIAN TOUR:

Mr Haines said he had the final details on the tour. This would cost \$1169 for sharing a twin berth and \$1319 single. These fares were all inclusive except that they excluded the evening meal.

On the motion of Mr Dickinson seconded Mr Penrose it was **resolved** that Mr Haines be empowered to promote the Canadian tour provided there is no cost to the N.B.A.

Mr Penrose wondered whether a bursar should come to New Zealand from Canada. Mr Lorimer said it was high time we did something about this question.

On the motion of Mr Lorimer seconded Mr Penrose it was **resolved** that Mr Haines be empowered to arrange for the hosting of a Canadian Bursar prior to the Secretary inviting him.

LETTER FROM MR APPLETON:

Mr Appleton had written about coming to New Zealand and staying with beekeepers.

On the motion of Mr Dickinson seconded Mr Haines it was **resolved** that Mr Appleton's letter be forwarded to the Editor for publication in the 'Beekeeper' in a condensed form.

CONFERENCE '74:

Mr Haines reported that he had talked to Mr Kevin Morris the organising officer of South Western Districts. The conference would be held at the Centennial Hall which had the public relations office in the front. There were facilities for typing, duplicating, there was a public address system built into the hall and there was a hotel just across the street from the hall, which had adequate accommodation.

DATE OF NEXT MEETING.

On the motion of Mr Haines seconded Mr Penrose it was **resolved** that Wednesday, Thursday and Friday the 13th, 14th and 15th March, 1974 be the date for the next executive meeting.



Restez là bien tranquillement, je vais aller chercher une ruche!...

(Dessin de Bergstrom).

A possible translation of the French might be: "Take it easy, friend, while I go and look for a beehive."—From "Gazette Apicole" (France)

HONEY CROPS PROSPECTS

SEASON 1973-74

Summaries of reports from Apiary Instructors on seasonal conditions and honey crop prospects as at mid-January to the Superintendent Beekeeping, Ministry of Agriculture and Fisheries, Wellington.

NORTHLAND

In the north the vital early months of September, October and November were cool and windy. However, colony strength built up and remained at a reasonable level. Swarming was a problem for a short period during October but eased off by the end of that month.

In the southern part of the area conditions were less severe but very changeable.

The manuka crop were negligible in all areas.

Warm, dry climatic conditions prevailed throughout December and January which eventually cut short the flows from clover and buttercup sources. Good flows from lotus major were experienced in central districts and a heavy budding of towai and northern rata was evident in the Far North.

Even with the improvement in the climatic conditions experienced during December and January beekeepers would do well if near average crops are harvested.

The quality of the honey gathered has been very high.

AUCKLAND

In the early spring colonies were very short of stores and well below average strength. Climatic conditions during September, October and most of November were unfavourable.

With the help of a large amount of sugar only enough nectar was gathered during this period to keep colonies alive and allow them to build up to good average strength, although flowering was good on all nectar sources.

With moderate swarming taking place during October and November the crop prospects at that time appeared poor.

Since early December the climatic conditions have been warm and dry

and bees have worked well on pasture weed and bush sources. Both manuka and clover sources have been disappointing in most areas. However, pohutukawas flowered well over a long period during December.

Average or slightly better crops are expected in most areas of the Auckland District of good quality honey.

HAMILTON

Colonies wintered well in the mild conditions experienced and by the beginning of August very few losses had been reported.

During August and September rainfall was above average with strong winds and heavy clouds. These conditions, held back essential spring work and the inspection of hives, however, with the early sources such as heath, willow, etc. flowering well, colonies retained their strength and brood rearing continued to increase. These conditions remained till the middle of October. Hives by this time were strong in bees with slabs of pollen but very short of honey.

Mid-October showed a change to clear skies, light winds and an occasional light shower, barberry and rewa rewa both failed to produce the expected crop but did feed the bees and fill a comb or two in the supers. Rewa rewa appeared to be stopped by a complete wind change after a few days of producing.

Conditions during November were good although winds were on the strong side, this slowed down production from buttercup which was now flowering well. Clover was beginning to show but required some good showers of rain and less wind.

Kamaha had a very heavy flower, bees worked this well and a good crop was obtained. Tawari also looked good.

December and to mid-January, tawari gave a reasonable crop but nowhere was it heavy. Manuka is also being worked well, and should finish up being a heavy crop. Clover and pasture weed sources need rain in the very near future to keep these producing.

Estimated crop is slightly below average. Should rain fall and pasture sources continue to produce into next month, crop could be lifted to a good average.

TAURANGA

Weather conditions in the Bay of Plenty during the early spring were unsettled with much cloud and lengthy squally periods. Hives emerged from the winter in good condition and progressed satisfactorily during the building up period. During the month of December climatic conditions became settled and warm.

Most floral sources bloomed freely, these included the willow species, prickly acacia, barberry (particularly in the Tauranga area), rewa rewa, tawari and clover. The rewa rewa flow was somewhat erratic in spite of the fact that the trees generally had a good showing of bloom. Changeable climatic conditions during November was a factor in a disappointing crop of honey being secured from this source.

Tawari, on the other hand, flowered extensively and over a prolonged period, and resulted in a good honey crop from this source.

Swarming during the season was about average for this district. It did, however, commence fairly early and because of the somewhat erratic conditions earlier, extended over a longer period than normal. At the present time, warm settled weather is continuing and clover is flowering freely.

In the Tauranga coastal area above average crops are anticipated. In the Rotorua area the present picture is for about average crops at this stage. However, Rotorua is usually some weeks later than the Tauranga area and if the present warm weather continues, it is likely that above average crops will be secured from the Rotorua area as well.

HASTINGS

Colonies came through winter in good condition for strength and food supplies. More rainfall during the spring resulted in better early pasture conditions this season.

Good yields from willows and kowhais were obtained in many districts during the spring.

Dry conditions prevailed during the early part of November, but good rains fell during the middle of the month reviving pastures in most areas. Winged thistle yielded freely and some surplus honey was stored from this source.

Rainfall during December was well below average with a light fall on the 19th which eased the drought situation. The honey flow during the month was disappointing with the lightest crop of manuka for many years.

During early January rain fell in most districts, bringing on clover bloom in pastures, but conditions have been too unsettled for a good honey flow.

Present indications are for a light to average crop of good grade honey for this district.

PALMERSTON NORTH

Most colonies opened up in good condition during the spring with some early swarming in some areas. Due to settled weather, most early nectar sources yielded well, with little supplementary feeding being required. Rainfall during winter and early spring was well below average with pasture conditions being much drier than normal.

These conditions continued until the middle of November when some rain fell but strong winds again dried out pastures. During the latter part of the month, in some areas colonies received a severe setback because of the lack of stores.

Very little rainfall was recorded in most areas during December and drought conditions developed in the coastal areas of Manawatu and Wairarapa. Because of better than usual weather, there was more honey on some hives than normal for this time of the season.

Rain fell in early January but windy, cold conditions restricted bee activities and again dried out pastures.

With more rain and warm weather an average crop could be produced. There was a very light flowering of manuka and little honey has been gathered from this source.

HAWERA

Conditions from early October on were in the main ideal and many hives situated in bush areas gathered a reasonable crop. On the coastal belt while weather conditions were fine and warm little rain was experienced and drying out of pastures became serious in early December, but with rain falling later in the month and clover appearing, a fair crop seemed assured. However, persistent winds alternating with hot and cold conditions were far from ideal and a below average crop overall is the result to date.

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NELSON

The district experienced a mild, dry winter with a cold, wet spring and considerable feeding was necessary.

The West Coast had rain on 27 days during November. The weather improved in December and fair yields of kamahi were obtained. The weather broke again at the end of December and wet, cold conditions prevailed early in January. Some rata is flowering on the coastal strip from Karamea to Barrytown with odd trees showing in inland areas. Rata is making considerable new growth and prospects from this source are not bright. With fine weather and high temperatures, lotus major, and minor bush sources, could produce a fair crop.

Marlborough pastures are still showing the effects of last year's drought and has reduced the crop. Manuka has flowered well and, with good weather, lucerne and vipers bugloss, could yield well.

In Nelson the rainfall has been adequate but lower temperatures have not favoured nectar secretion. Manuka, clover and pasture weed sources have flowered well and an average crop can be expected.

Some honey has been extracted, but the season appears late and the district as a whole can expect a below average crop.

CHRISTCHURCH

Once again a season of below average rainfall and while the spring growth looked good, the hoped for rains in November/December failed to arrive. The light lands dried off without the clovers having a chance to yield and an average crop only could be obtained off the medium to heavy land.

The honey crop at present estimated is just above the six-year average.

OAMARU

Heavy rain and snow in August ensured good spring pasture growth. Colonies generally came through the wintry conditions in good order.

Early nectar sources, particularly willows, dandelion, brassicas and native bush sources yielded well.

Dull, cold weather in October and November severely restricted bee activity and colonies throughout the district ran very short of feed. Some colonies died from starvation; in many, brood rearing was checked. Sugar was fed to many hives until clover began to yield early in December.

Fine, windy weather since early December has dried out pastures and drought conditions exist in many areas. Very little honey has been gathered and prospects are for a below average crop.

GORE

With dry conditions, cold winds and less sunshine hours in December, clovers were slow to come away. Colonies generally were strong but did not become self supporting until the middle of the month.

January was dry, and windier conditions prevailed overall.

Although clover flowered prolifically in most regions weather conditions have reduced honey flow in all the drier areas and crop prospects here are poor. The remainder of the area is still producing honey and here prospects are for a better than average crop.

The total overall prospect is for an above average crop.

DISTINGUISHED OVERSEAS VISITOR

Dr. Richard Taylor, Naples, New York, USA

Last month we were favoured with a visit from Prof. Taylor who will be known to some New Zealand beekeepers as the writer of the column "Bee Talk" in "Gleanings in Bee Culture" (USA) over a long period of years. More recently he is also writing in the "American Bee Journal".

Dr Taylor was on holiday here with his wife and it was a pleasure to meet and chat with them as they soaked up some of our plentiful sun. While here Richard was putting the finishing touches on his book, "The How to do it Book of Beekeeping" and the editor had the privilege of suggesting some corrections after he had read the typescript. When it is published we will review it and advise where it may be purchased.

He also has another book which is more of a philosophical approach to a beekeeper's thoughts. This will also be reviewed in due course.

The editor found it most stimulating talking of developments in Dr Taylor's methods of beekeeping. For example, his 100 or more colonies are located in up-State New York only about 10 miles from the shore of Lake Ontario in Canada. In that area one can expect substantial snowfalls in winter with sub-zero temperatures at times. Traditionally, hives were elaborately packed to insulate against the cold, and some have even killed their bees off to save feeding as is done in much of Canada. More recently a liberal approach to winter management has omitted the packaging and has even

The Editor asked Dr. Taylor to comment on various matters relating to his New Zealand visit after he had returned home.

"You asked for the following:

1. What I consider the essential fact about my interest in beekeeping:

"I started with bees about thirty-five years ago, and have been obsessed by them ever since. I got into bees very seriously in the fifties, in New England, then moved to up-State New York, in the sixties, and have been a small commercial beekeeper since then. Up-State New York is correctly considered one of the world's primary regions for beekeeping. I've been contributing to "The American Bee Journal" and "Gleanings" since about 1958, and have had a regular feature, 'Bee Talk' in 'Gleanings' for four years now. As a sideline I am a



RICHARD TAYLOR

added a hole or two in the top box to provide ventilation with surprisingly good results.

Prof Taylor said his main regret was that he had not been able to meet more beekeepers while in this country. However, he did greatly appreciate the efforts of Brian Milnes, Apiary Instructor, Auckland, who took him to visit with a few of the local commercial men who were available at that time. His final words were, "I'll be back next year and hope to see more of beekeeping people then."

Professor of Philosophy, and have held Professorships in several universities—currently, the University of Rochester.

"2. My writings, especially the two books.

"The two bee books are 'The How-to-do-it- Book of Beekeeping', which is a practical manual setting forth what other practical manuals have passed over, and 'The Joys of Beekeeping', which is a philosophical account of the life of beekeeping, the beekeeper's associations with nature, etc. (I have also written six books in philosophy, the first of which, 'Metaphysics', had many printings and two editions and was translated into four languages, and the latest of which was 'With Heart and Mind', St. Martin's Press, New York City, which has the sub-title: 'A Philosopher Looks at Nature, Love and Death'.

"3. Glossy picture.

"This one isn't very glossy, but it is the only one I am able to dig up."

RICHARD TAYLOR.

Dr Taylor's "Bee Talk" page in "Gleanings in Bee Culture" will be of interest to many New Zealand beekeepers even though many of the nectar sources will not be familiar. We reprint here his page for September which corresponds to March in the Southern Hemisphere.

The summer honey flows have been disappointing around here this year, though friends not too far away have brought me better reports. There was a brief but intense flow from the raspberries up in the hills where I have a new apiary, and this gave me a few hundred comb honey sections just in time to get my roadside stand going, but there has been little else so far. Now we need a good autumn flow. If we don't get it this will have been the poorest season for a long time for me. But I believe that flow is coming. The goldenrods are colouring up nicely, and there is always that chance of buckwheat.

Paradoxically, the season of the honey flow is the most relaxed time of the season for the beekeeper. The activity is feverish, unremitting, but it is the bees who are working. Their owner is waiting, watching the weather, noting the blossoms, perhaps keeping an eye on his scale hive, always trying to gauge the extent of the flow. All this is in vain, for there are no reliable signs. He can only wait and see. Even a strong honey flow can stop suddenly, modifying one's expectations.

The volume of nectar the bees gather in a short time during a good flow will never cease to astonish me. A bee can carry only a drop, and must usually fetch that from a considerable distance, sometimes miles. Even so, the nectar is more than half water and must be distilled. Knowing

this the beekeeper is apt to make the mistake of under-estimating the speed with which supers can sometimes fill up. It is a serious mistake, for without room to store it no more honey can be gathered, even at the peak of the heaviest flow. Nectar that remains in the fields for want of combs to store it in is nectar that will not add a penny to the beekeeper's purse.

The bee yards are a hum of industry during a flow. The bees are quite literally working themselves to death, driven by instinct to ensure the survival of the colony and the species, not their own. Of course one does not get this impression of desperate, driving work when he visits the bees. Instead one sees bees coming and going in great numbers, oblivious to everything but the nectar that awaits them, oblivious even to intruders like oneself. They are fulfilling their purpose, and their morale is high. If a bad turn in the weather at this point forces idleness upon them, giving them every excuse to relax and extending their individual lives by enforced rest, then they become irritable and ready to sting. This is probably why they are cross during a heavy buckwheat flow. The buckwheat blossoms for some strange reason dry up about noon every day, to the great frustration of the bees.

Sometimes when the scale hive begins to show great gain it is a mystery where the nectar is coming from, for the beekeeper is likely to

WITH HEART AND MIND

**A Philosopher Looks at Nature,
Love, and Death.—By Richard
Taylor.**

The author of this book, an outstanding American philosopher, is known by the readers of *Gleanings in Bee Culture* as the contributor of the regular monthly column "BEE TALK". Dr Taylor, a Professor of Philosophy at Swathmore, The Graduate Faculty of Columbia, and the University of Rochester, offers his new book through St Martins Press Inc, 175 Fifth Ave, New York, N.Y. 10010. The price is \$US6.95.

see no significant sources. But of course the sources can be inconspicuous. Sumac blossoms do not even look like blossoms to us, unless examined closely, but the bees assess them differently. If one steps up to a sumac he may find dozens of bees moving from bob to bob, touching for only the briefest instant each of the minute flowers clustered together. Other blossoms are similarly inconspicuous to the human eye. Basswood can bloom with almost no awareness of the fact on the part of men, except, of course, for the beekeepers among them, who have had their eye out for such things. Other sources may be distant, their existence unknown to the beekeeper but perfectly known to the bees. It is generally claimed in the literature of apiculture that bees rarely fly more than two miles from the hive, and ordinarily much less, but I have reason to think that greater flights are not uncommon. Buckwheat honey may appear in my hives, sometimes in great quantity, when search discloses no buckwheat fields in the area at all. And unlike the sumacs and the basswoods, snow white fields of buckwheat are not easy to overlook.

Although the period of the honey flow is a time of the most intense and driving activity of the bees, it is strangely and admirably not competitive, and the co-operativeness within the colony which has been the foundation of their survival over millions of years appears to be carried over to the fields as well. Thirty hives sitting side by side exhibit not the slightest

sign of rivalry for the bounty of the fields, each carrying on its work as though the others did not exist. Of course this mutual acceptance can suddenly end when special conditions arise. If the weather or the aging of the season brings the honey flow to an end, then a weak colony may become prey to stronger ones. But this is quite rare, and is usually brought about by the bungling of the beekeeper himself.

This spirit of co-operation, the avoidance of debilitating rivalry that is carried over even to the foraging areas, is one of the foundations of apiculture. Bees are never found fighting over discovered sources of nectar. A single basswood tree can be filled with bees from a dozen hives without the slightest hint of conflict or rivalry. Two worker bees, who would fall into immediate combat if they were to encounter each other at the entrance to one of their hives, meet on a sumac blossom with the most total indifference, and will under no circumstances race against each other to gather the nectar. Instead, one of them simply moves off to another blossom. More than this, a given source of nectar seems to be visited by no more bees than can effectively and efficiently gather from it, even when nectar is scarce. Thus the number of bees gathering from a patch of alfalfa or from a fruit tree seems to be proportionate to the abundance of nectar available there. As this diminishes, so does the number of bees. They do not as men would, fall to fighting over the dwindling supply.

When we marvel at the prodigious feats that are wrought by the bees, when we are staggered by the vast quantities of honey that can sometimes be stored up by a single hive, we are likely to overlook what is surely a part of the explanation; namely, that the energy of the bees is directed so exclusively to this result, instead of being spent in competition and rivalry. Co-operation and mutual restraint are not, of course, unknown among certain other animals, nor among men, but I believe that nowhere else does it approach the level exhibited by the bees extending beyond the hive to the distant fields. The bees owe their survival to this, and it is to this that the beekeeper, too, owes his harvest.

OPERATION TRAVEL BEE

New Zealand Beekeepers' Tour of Canada

June 14 to July 12, 1974

The cost of \$1319 per person on a single room basis and \$1109 on a share twin basis. This could be subject to a 4% rise because of the fuel crisis and 15 persons making the tour. For those who wish to extend their travel, this is possible but also subject to the minimum of 15 persons taking the complete tour. The price does not include the main meal of the day or spending money.

**Please forward a deposit of \$100
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OPERATION TRAVEL — BEE

1974 NEW ZEALAND BEEKEEPERS' TOUR OF CANADA

June, 1974

Friday, 14th: Today you depart Auckland on Air New Zealand flight TE552 to Nandi. Upon arrival you will be transferred to the Nandi Travelodge where overnight accommodation has been reserved for you.

Saturday, 15th: This afternoon you will be transferred by air-conditioned car to the airport to connect with your flight to Vancouver. Depart Nandi on CP Air flight CP302 and arrive in Vancouver on the same day at 9 a.m. You will be greeted and transferred to your hotel. Afternoon at leisure.

Sunday, 16th: Morning: Depart hotel for tour of packing house—Bee Cee Honey (Arctic Processing). Afternoon: Visit to Hodgson Bee Supplies and general tour of Vancouver.

Monday, 17th: Morning: Depart hotel and board ferry to Vancouver Island; tour of Butchard Gardens. Afternoon: Visit to Babes Honey; general tour of Victoria.

Tuesday, 18th: Morning: Depart hotel, board ferry to mainland; coach trip to Vernon via Manning Park Lodge, Penticton and Kelowna.

Wednesday, 19th: Morning: Tour of local bee farms with guide from Provincial Apiarist Department. Afternoon: Continuation of tour; return to hotel.

Thursday, 20th: Morning: Depart from hotel in Vernon to Banff via Rogers Pass. Afternoon: Sightseeing.

Friday, 21st: Morning: Banff to Lake Louise sightseeing; return to Banff.
Afternoon: At leisure.

Saturday, 22nd: Morning: Depart hotel in Banff for Calgary. Afternoon: Tour of Calgary.

Sunday, 23rd: Morning: Depart hotel with guide from Provincial Apiarists' office to Bassano, Alta. and Central Alberta Dairy Pool. Afternoon: Visit to bee breeders' ranch.

Monday, 24th: Morning: Depart hotel for tour of local breeders and transfer to Calgary Airport for departure to Winnipeg. Afternoon: Transfer to hotel in Winnipeg. Evening: Cocktail party hosted by Winnipeg Chamber of Commerce with introduction to leading apiarists, breeders and provincial apiarists. Theme: packaged bees.

Tuesday, 25th: Morning: Tour of Manitoba Co-op. Afternoon: Visit to Research Department of University of Manitoba.

Wednesday, 26th: Morning: General tour; transfer to airport for flight to Toronto. Afternoon: Arrive Toronto; transfer to Guelph.

Thursday, 27th: Morning: Depart hotel for excursion to Research Department of Guelph University.

Friday, 28th: Morning: Tour to bee packers and honey producers in Guelph area. Afternoon: Continuation of tour.

Saturday, 29th: Morning: Depart Guelph for Niagara Falls. Afternoon: Tour of local bee colonies.

Sunday, 30th: Morning: Sightseeing of Niagara Falls. Afternoon: Transfer to Toronto Airport and flight to Ottawa; transfer to hotel.

July, 1974:

Monday, 1st: Morning: Tour of research station, central experimental farm. Afternoon: Tour of Benson's bee packers, Metcalfe, Ontario.

Tuesday, 2nd: Morning: Transfer to Montreal, by coach. Afternoon: Tour of Montreal; return to Ottawa.

Wednesday, 3rd: Morning: At leisure. Afternoon: Tour of Parliament Buildings; transfer to airport and depart for Toronto; transfer to hotel in Toronto.

Thursday, 4th: Morning: At leisure. Afternoon: Excursion to Ontario Place, tour of Toronto area. Evening: Farewell dinner.

Friday, 5th: This morning you will be transferred to the airport. Depart Toronto on C.P. Air flight to San Francisco and Los Angeles. Upon arrival in Los Angeles, transfer to Hollywood Holiday Inn for accommodation until the 8th.

Saturday, 6th: At leisure.

Sunday, 7th: Full day Disneyland tour including entrance and eleven attractions.

Monday, 8th: Today you will be transferred to the airport. Depart Los Angeles on Pan American Airways flight to Honolulu. Upon arrival at Honolulu, you will be met and transferred to the Iwka Hotel for accommodation until the 11th.

Tuesday, 9th: Half-day deluxe Little Circle Island/Sea Life Park Tour in the afternoon.

Wednesday, 10th: At leisure. Evening: Farewell cocktail party.

Thursday, 11th: Today you transfer to the airport for your flight to Nandi. Depart on C.P. Air flight CP 301 which arrives in Nandi the next day.

Friday, 12th: Arrive Nandi. Depart Nandi on Air New Zealand flight to Auckland. Arrive Auckland.

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World prices have reached the highest in the history of this company's experience. However, with the uncertainty of the effects the fuel crisis will have on the economics of many wax buying countries it is difficult to predict further trends. If you have any wax for sale please ask for our latest quotation.

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Extra Heavy Brood	35	210	16	211
Thin Super Full Length Full Depth	35	420	16	422
Thin Super Standard Half Depth	33	981	15	893
Thin Super Full Length Half Depth	33	825	15	827
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Nectar for Novices: A Section for Hobbyists, Amateurs and others

By P. W. Marshall, Hastings

Fellow Hobbyists: Toast The Queen

And who better to toast at the end of a honey season when we survey the rewards of a year's work. However, this is also the time of year to compare your colonies with each other on a performance rating. Answers as to why some were low in honey production should be sought and corrected.

If weather and conditions have been adverse it is easier to blame this than one's own performance in the apiary. But, from personal experience, even if this was the case, a difference between colonies in honey production can be observed. This can usually be blamed on the lack of bee strength due either to drift, swarming, a poor queen or, in some cases, disease. If the latter is suspected it should be confirmed with your local Apiary Instructor who will advise as to what action to take. But it is important to leave all honey from such hives well alone and in place on the hive.

As for the other factor, a certain amount of drift takes place in every apiary, but if excessive, a change in location or apiary layout should be contemplated. Shelter from prevailing winds is important to stop bee drift to one end of the apiary. It pays to stagger the hives in an irregular pattern rather than in a straight row. By doing this you will be assisting the bees in the orientation of their own home.

If no other outside influences regarding lack of bee strength can be found, the fault in many cases can be laid at the door of the queen. On her, the sole egg layer in the system and therefore provider of present and future bees, rests the well-being of the colony for strength which is related during the season to honey nectar gathered. Remember, that the colony is divided into two divisions, Household and Field Staff. The more bees, the higher proportion of field staff available for gathering honey.

During the season it becomes obvious which colonies are headed by a good queen, and when in full lay she looks to the beekeeper a

Nectar For Novices: News, Notes For Amateurs and Hobbyists

better sight than the centre page of Playboy magazine. From past experience I have found many hobbyists, and in fact even a few commercial beekeepers, prefer to overlook the problem of a failing queen and regard it as one the bees should solve. However, with this type of management it can be noted over a period of years that even though the breed started off light in colour, as well as quiet of nature, with the passing of time they become darker in colour and much more aggressive in nature. A factor that has caused the abandonment of many small apiaries throughout the country.

For the enjoyment of beekeeping as a hobby it is advisable to requeen your hives every two years. Such requirements can be obtained from reputable queen breeders whose advertisements can be found on the pages of this journal. With the hobbyist the expense can be kept to those of the lower price range. The tested and select tested queens are purchased by commercial beekeepers in an endeavour to improve their own stock. These queens have usually proved themselves over a season for purity of strain, colour, egg production, ease of handling, and honey production. Although the best, they are probably too specialised for the small beekeeper.

Untested queens are those, who have mated and commenced egg laying but have not proven themselves under working conditions. For most they are ideal material for requeening the run-of-the-mill honey producing hive. And autumn is the time when this job should be undertaken, although it is advisable to order your requirements early. With spring requeening the job seems a little more difficult to obtain acceptance of a new queen in the hive with the prospects of a new season before them. But autumn requeening is easier as they are preparing for winter and accept a new-comer a little more readily as the opportunity to replace her at short notice is a little more difficult.

On arrival, usually by letter post, she will be enclosed in a specially designed cage containing escort worker bees and food in the form of candy. If prior notice has been received the colony can be prepared by removing the old queen three days prior to introduction. This can then be done on the planned day after the emergency queen cells have all been destroyed. The theory being that having no further eggs or young larvae available for raising more queens they must accept what is given them. However, I have found it just as easy to remove the old and immediately replace with the new. Introduction is simply done by placing the cage between the the centre frames of the brood nest. First making sure that the entrance is unblocked to reveal the candy. The idea being that once this has been consumed the queen is released and if all goes well, is accepted by the colony. Do not be too concerned if she is not, for *percentage-wise*, the rate of acceptance is around 80%. Also, if you are requeening a dark strain of bee with a light-coloured queen, the percentage is even lower. They are inclined

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to let her live for a while in the hive until she has laid a frame or two of eggs then is killed off and they raise their own. In this case at least you are part way there. However, for safety purposes it pays to requeen only half your hives so that if anything does go wrong you have on hand a source of eggs and young bees to assist the queenless hive. But, one word of advice, once the new queen is introduced close the hive and leave well alone for ten days. In such matters the bees are better off not being disturbed.

Do not be put off with what might or might not happen. The end results are worth it in that the bees are a joy to handle and honey production is increased.

Seasonal Notes

To the accompaniment of much muttering from the womenfolk of the household, the beekeeper is extracting his honey crop and everything is sticky to the touch.

For those with only one or two hives the extraction of honey can be a problem if not extractor is available to help process the honey by removing it from the combs. Ideally the small hand-operated two-frame extractor is what is required. Better still, a very obliging friend who owns one, of the use of one through your local Hobbyists' Club.

If both are not available the other course left open is the strainer method. Here the only requirements are a large bowl or preserving pan, a length of cloth suitable for straining and a large spoon. Cover the pan with the cloth and, holding the frame over it, scrape with large spoon down to the mid-rib allowing the honey-wax mixture to fall into the cloth. On completion, tie it up as a bag to be held 6-8 inches over the pan which collects the honey as it draws out (leaving after a day or two) only the wax.

The honey can then be left as liquid to granulate naturally, which can result either as a smooth or coarse grain. Or, if a smooth grain is required, 10% of a suitably fine granulated honey should be stirred in, and repeatedly stirred for short

A Pramful of Bees

Beekeepers like to amuse their audiences with bee-keeping anecdotes often directed against themselves. One of the funniest was told recently by a Luxemburg beekeeper who drove home a swarm in a pram. A neighbour of his, with no further use for the vehicle, had left it out on the lawn to dry in the near-by brook. Whether after thoroughly cleansing it this was meant to invite another future visit by the stork is not related, but a swarm of bees got in first, sensing rightly that a pram is a convenient aid to propagation of the species. The beekeeper was summoned and requested to remove his errant tribe. Problem — how to decant a swarm from a pram into a skep? On swift inspiration (a beekeeper make quick decisions) he must always be ready to wheeled the pram cum bees away to his beehouse where they were quickly secured. There was great hilarity among the spectators.

Hobbyist Clubs

The Editor apologies for the lack of notes from the many clubs which have been formed all the way from Whangarei to Christchurch. Truth is, Auckland is the only club which has bothered to put me on their mailing list.

That Smoker

There will shortly be beekeepers who only started keeping bees last year and are looking forward to their first inspection. Don't rush at it. Give a few puffs of smoke at the entrance and leave things for a short while so that the bees can get filled up with food. As to smoker fuel, I find dry rotten wood by far the best. However, if rotten wood is used be careful to see that the wood is really out before putting the smoker away.

Corrugated paper makes good fuel but it tends to gum up the smoker with a tar deposit difficult to remove.

To all readers I would advise being extra gentle and careful on your first inspection. I have seen all too often a moment of carelessness result in brood comb dropped. Bees seem to remember bad manipulation treatment and react in a bad-tempered manner for the rest of the season.

Book Review

A number of readers have written asking where they can procure the book, "How to Keep Bees and Sell Honey", by Walter T. Kelly as reviewed in November 1973.

As noted in the review, these books are available from Walter T. Kelly, Clarkson, Kentucky, U.S.A., at \$1US post paid.

periods from time to time over a period of 3-4 days and then stored in a cool temperature. Ideally this should be 56°-57° F., but if warmer the granulation will only be slower. And a slower granulation usually results in a coarser product. So, careful regulation of temperature and use of a fine starter are essential if a quality smooth product is to be produced.

Whether or not the frames have been scraped or extracted it is advisable to return them to the hive for the bees to clean and dry. Wet frames stored over winter usually harbour yeast bugs that can create fermentation problems at a later date. While in a dry state they are cleaner and not so messy to store.

Prior to storage sort through the comb and separate out the white and dark combs. Storing only eight to a super with plenty of gap between combs, stack five high on a drip tray. For maximum wax with control seal the joints between supers with masking tape. Placing on top a sheet of newspaper pierced with holes and scatter over this P.D.B. crystals before closing off with a tight fitting lid. A check on the crystals should be made every 3-4 weeks and renewed when necessary.

By early April in cooler areas, consideration must be given to wintering down. Average stores for a colony to survive winter is about 40-50 lbs; this can be regarded as a full super of honey. This should last until mid-August when a check on the fed situation can be carried out.

It is advisable to keep some honey aside for spring feed requirements with storage being the same as the dry combs. However, before feeding out allow the stock to air out as the bees find the smell objectionable. However, it is worth noting here that feeding with raw or white sugar may be a satisfactory substitute for honey.

One important point to remember when preparing a hive for winter is not to re-

arrange the broodnest. That particular job at this time of the year is for the bees and so long as they have plenty of stores, in a dry location, and built with sound materials they will last through the winter.

The other important factor that you should be considering at this moment is whether or not requeening should be carried out. Such a programme should be done every two years and is part and parcel of beekeeping.

The Editor Joins The Swarm

About the time we went to press with the November issue (very late) I combined my swarms and started the year 1974 with two colonies, one quite strong and the other what I would describe as weak.

My fascination has reached its zenith watching bees "fanning". The pictures I have seen and the description I have read were accurate and gave me a pretty good idea of the reasons for this operation and just how it is carried out. But they didn't tell me that it reaches its peak in the afternoon when a flow is on and may even continue after dark if it is very warm.

Having watched the numbers of bees which are assigned to this task and the serious determination with which the operation is carried out, I now know how my workers can reduce the moisture content of up to 60% in the nectar they bring to the hive to the honey with not much more than 20% I will be extracting shortly.

It was while reflecting on all this that another thought crossed my mind, about the origin of the word "fanny", referring to a person's sitting end. Could it have some connection with my bees "fanning" with their other ends proudly raised towards the hive and wings moving so rapidly I can't see them, only the outline of their orbit?

Colonies Fed Different

Kinds of Pollen

Substitutes

The addition of 20 g of maize pollen, maize flour, soya bean flour, broad bean flour or roasted chick pea flour to syrup (200 g sugar plus 100 g water) each time it was fed to a colony in winter increased brood rearing. Maize flour proved to be significantly better than the other flours, and equalled maize pollen as a food. Bees that spent their larval stages in colonies fed on syrup mixed with maize pollen or flour weighed more and had better developed hypopharyngeal glands as adults in a queen-right colony fed sugar syrup than those that were reared in colonies fed on sugar syrup only. Maize flour was also fortified with skimmed milk powder and brewer's yeast in varying proportions. All mixtures of this fortified maize flour surpassed maize pollen in their effect on brood rearing, and the effect was greater as the proportions of skimmed milk and yeast were increased. The life span and body weight also increased when the rearing colonies were fed mixtures containing more skimmed milk and yeast.—From Colorado Bee Notes.

AUCKLAND BEEKEEPERS' CLUB INC.

"The Friendly Club"

Patron: Sir Edmund Hillary.

Motto:—Learn, Educate!
P.O. Box 3672, Auckland
11th February, 1974

Dear Fellow Members,

This is harvest time, have you noticed the honey flow is over? In other words for the Club Apiary, we will have Extraction Day on Saturday next, 16th inst. as usual at the Pasadena Intermediate School Hall. Starting time 10 a.m. at the Club Apiary to get the honey boxes (Supers to you) up the hill to the truck and then to the hall. That is where we need some active help by members, it is not a big job with hand-carriers but help is required and this is where Club spirit is shown.

It is all interest too, to see how the bees are cleared from the Supers.

Extraction will commence as soon as the plant is set up at the school hall. The honey will be available to members at nominal prices for Club funds in standard 5 lb tins only. Tins are supplied but if any members can bring their own 5 lb tins, so much the better for the Club. It has not been a good season and supplies will be limited.

Bring your lunch and have a day out plus the children. There is ample playing ground and there will be a lollie scramble for them, a plate of scones, etc. too, will be welcome. Tea will be available.

The Club has two hand extractors available on hire from our old member Bob Dowling at No. 8 Wheturangi Road, Greenlane, 548-640. Anyone hiring is asked to return without delay so that others can have them available — a simple gesture to Club members.

The Annual Meeting is arranged at the same hall on 6th April when we also hope our Club Show of members' exhibits. A schedule of classes is enclosed and there will be prizes for each class with the aggregate points winning the Club Shield for the year. Now show your interest and prepare your samples. Frames of good sealed honey particularly will be welcome. A further circular will be issued for 6th April as a reminder while this will give you ample time to make up your exhibits and select suitable frames. Standard jars only will be accepted and these will be available on Extraction Day at cost.

Extraction Day is a lot of fun and interest working the electric knife for uncapping, helping the extractor, packing, etc. so come along and show your interest in your Club.

With compliments,
Reg Sanderson, Hon. Sec; Phil Muir, President.

ANNUAL HONEY SHOW: SCHEDULE

Our Annual Honey Show is to be held at Pasadena School in conjunction with the Annual General Meeting. We feel that to make the Show a success and to help those who are entering exhibits for the first time, some guidance as to what the judges look for may be helpful at this stage. As you may be aware, the Club's Competition Shield is awarded to the competitor who obtains the most points for all exhibits on the basis of 5 points for a First, 3 points for a Second, and 1 point for a Third.

There are to be 10 classes as follows:—

1. Full depth extraction frame.
2. Full depth comb honey frame.
3. Half depth extraction frame.
4. Half depth comb honey frame.
5. Dark honey granulated.
6. Dark honey liquid.
7. Light honey granulated.
8. Light honey liquid.
9. Section honey.
10. Wax.

General Rules—

- (a) Entrants may enter up to three separate exhibits in each class.
- (b) The judges' decision will be final.
- (c) Exhibits are to be delivered prior to 2 p.m. on the day of the Show.
- (d) Liquid and granulated honey are to be in the standard Show jars obtainable from the Secretary.
- (e) Classes 5, 6, 7 and 8: only 1 jar is required for each exhibit.
- (f) One section is required in Class 9. In other years we have requested two, but due to this season's poor crop, one will suffice.

Dealing with individual classes:—

1. Full depth extraction frame—
This should be of extraction standard, that is to say, a heavy frame as wide as possible which makes for ease of uncapping. The judge will look for evenness of capping, freedom from blemishes, weight, freedom from pollen, general condition. Care should be exercised in transporting such frames. Some entrants make a special stand and others use a nucleus box.
2. Full depth comb honey frame—
This is normally a store frame of medium weight and thickness suitable for cutting into comb honey. The judge will look for uniformity in thickness, uniformity in capping, freedom from pollen and freedom from defects. Preference will be given to frames completed from new foundation.
3. Half depth extraction frame—
The same remarks as for full depth extraction frame apply.
4. Half depth comb honey frame—
The same remarks as for full depth comb honey frame apply.
5. and 7. Granulated honey, dark and light—
The entrant is the judge of which class to enter. Normally light coloured honey ranges from light amber to paper white; the judge will take notice firstly of flavour, then colour, condition, grain, and freedom from foreign matter. Please remember to obtain the standard show jars. The reason for this is uniformity, as you may be aware that different types of bottles and jars have varying light densities depending on the thickness of the glass. Remember one jar only is required for each exhibit.
6. and 8. Liquid honey, dark and light—
Standard show jars are essential. The judge will give most points for flavour, then colour, and freedom from foreign matter. Remember that one jar only is required for each exhibit.
9. Section honey—
Points are awarded for flavour, completion of capping, freedom from travel stain and general appearance. Entrants are urged to present their exhibits to the best advantage, for example, the propolis should be carefully removed and the woodwork carefully cleaned by sanding or other means.
10. Wax—
Each exhibit must be at least 1 lb in weight and must be from this current season. It must be presented as tipped from the mould. Points will be lost for obvious scraping or chipping. The judge will look for colour, texture and impurity. There is no bar to the shape of the mould. Entrants are advised not to heat wax in an iron or enamel container as this may darken the wax. For preference use an aluminium container. Do not overheat wax and cool slowly as this makes for uniformity in texture and freedom from cracking and chipping. Wax should not be directly heated. As far as possible, avoid propolis in wax as this tends to darken the colour.
Note — one teaspoon of vinegar is a great improvement.

General—

Members are requested to enter into the spirit of the Competition and, although they may not consider some of their possible exhibits up to Show standard, would they "give it a go".

Spring Has Sprung!

Beekeepers worry now with reason
About the opening of the Season—
They want to know the sordid facts
Concerning Value Added Tax—
If honey's sixty pence a pound—
Will there be plenty to go around?
Though many think (with some
disquiet)

That no-one could afford to buy it.
We might get yields of tons of honey
And sell it all for love, not money.
This could give rise to consternation,
For how would we buy new
foundation?

The catalogue from E. H. Thorne
Quotes prices too steep to be borne—
But things would be a pretty pickle
If we could pay by slap-and-tickle.
The catalogue put out by Lee's
Shows that we must stop pampering
bees

By letting them live cosy lives
In too-expensive modern hives,
And we will have to keep our stocks
In straw skep or in wooden box.
Oh, well! 'Tis useless to repine—
This Spring, the weather's warm and
fine,

Our stripey girls are most particular
'o stuff with pollen each corbicula—
And hasten home with protein riches
Resembling coloured baggy breeches.
There is a sign they're making food
To raise whole frames of hatching
brood

And send great clouds of bees to field
In June, to bring a heavy yield.
Count not your chicks e're they be
hatched—

For all our profit may be snatched
By cold weather in late Spring awhile,
Unless we feed 'em Tate and Lyle.
Friend Butt must go round on
inspection

Lest Bacillus larvae spreads infection,
And we might see our season's toil
Go up in holocaust of oil.
These perils threatening apiculture
May swallow profits like a vulture.
And why do we risk getting stung?
Our ups and downs help keep us
young.

We must expect a little battle
To keep a million head of cattle.
My word, there'd be some trouble
brewing—

If all the blighters needed shoeing!

E. R. HAYWOOD,
Torbay Branch.
From an English source.

Sydney Royal Easter Show

It was a pity to see that of nearly
4000 registered beekeepers in N.S.W.,
only two were interested enough to
enter their products in the open com-
petition at the Royal Show. Over the
past two or three years this section
of the show has been losing support
to the extent that R.A.S. officials and
those donating prizes are wondering
whether it's worth having a competi-
tion of apiary products. When we con-
sider that over one million people visit
the show each year it would be a pity
to lose the section. Maybe next year
some other beekeepers will consider
their products worth exhibiting. Con-
gratulations to Jack Schouten and
Darcy Dibley for the effort they took
to exhibit their produce.

From experience in another field the
Editor is convinced that New Zealand
beekeepers could well exhibit their pro-
duce in Sydney next year.

Chemical Analysis

When Amelia was scratching for sus-
tenance in an old autograph book
recently she came across the follow-
ing; it made her shake her head for
the oldies.

WOMAN — Chemical symbol, Wa,
atomic weight 120. Occurrence, found
where man is and sometimes, but
seldom, in a free state. Rounded in
form; boils at nothing and may freeze
at any moment. Melts when treated
properly but becomes bitter if not
used well.

Chemical properties: Very active;
possesses a great affinity for gold,
platinum, silver and precious stones.
Violent reactions when left alone. Can
absorb great amounts of food. Turns
green when placed beside a better
looking or/and better dressed speci-
men. Uses: highly ornamental; useful
as a tonic. Equalises the distribution
of wealth. Is probably the most power-
ful income reducing agent known.
Caution: Highly explosive when in in-
experienced hands.

A.J.G., 1925.

Fancy that! Times have changed—
or have they?

—North Eastern Kansas Beekeepers'

Letter to the Editor

Sherinside, Stonehouse Road,
Halstead, Sevenoaks,
Kent. TW14 7HN
15/2/74

Dear Sir,

I am writing to you for information re beekeeping in New Zealand. Perhaps you could assist me with the many questions that present themselves and maybe forward to me a copy of your current magazine.

I am contemplating migration to your country and since it has always been my intention to produce honey as a full-time occupation in this country I feel that maybe I could do it in New Zealand to more advantage. At present I have 150 colonies in New Standard Hives (i.e., Langstroth dimensions but radiant depth brood boxes) both for honey production and pollination. I do this as a hobby whilst being a Serving Metropolitan Police Officer.

The questions I want to ask are innumerable but here goes with a few:

1. What are the major sources of nectar producing plants in your country?
2. Where are they distributed in your Islands?
3. Have you a Bee Farmers' or Honey Producers' Association?
(We have in Britain the Bee Farmers' Association where members have to have over 40 hives.)
4. How is your honey marketed and by whom — at what cost per lb?
5. Would it be possible to get pollination contracts re fruit pollination — what fees are charged?
6. How many bee farms have you and where are they in your Islands?
7. Do you feel it would be possible for a living to be gained from honey production in New Zealand?

I could go on but I feel I'm putting a burden upon you I don't want to impose.

I also feel that I should get to know New Zealand before setting up my own unit and that working on a bee farm in New Zealand would be a help; perhaps you could advise me as to this possibility.

I'm 32, married with two sons, 8 and 6 years.

I would be very grateful for any information which would assist me in making this decision.

Yours sincerely,
CHRISTOPHER W. MORRIS.

P.S.: I'm the inventor and supplier of the Hoffman Connector/Spacer Clip (see "Bee Craft", Jan. '73).

Perhaps one or two beekeepers will reply.—Editor.

THE IMPORTATION OF THE HIVE BEE INTO NEW ZEALAND

This account was published in 1916 and presented to the
Cawthron Institute in 1925 under the will of the author.

CAWTRON INSTITUTE

This volume is part of a valuable
collection of books received under the
will of

ISAAC HOPKINS,
of Epsom, Auckland,
October, 1925.

TO MY BEEKEEPING FRIENDS IN NEW ZEALAND

At the suggestion of several old
beekeeping friends I promised some time
ago to write a brief history of the
progress of Modern Commercial Bee-
keeping in New Zealand, from its in-
troduction into the country down to
they resent time. This, with the con-
sent of the Editor of the "N.Z. Far-
mer", was published in a series of
articles last year in the bee columns
of that journal. Having records by
me, and my memory serving me well,
enabled me to jot down fairly com-
plete particulars of such events as
now seem to me to have had the
greatest influence in shaping the
course of our beekeeping industry.

Seeing that I have taken a leading
part in all movements herein recorded,
the frequent use of the personal "I"
was unavoidable. To have given the
names of all connected with the
pionering of the industry would have
made too formidable a list, so I have
only mentioned those that could not
well be avoided.

While the "Reminiscences" were be-
ing published I had ample proof of
the interest taken in them, and I
think any of the younger generation
of our beekeepers who have read them
will better appreciate the favourable
conditions under which they now
work, as compared with the difficulties
the pioneers of the industry had to
contend against.

Regarding the present condition and
the future prospects of Commercial
Beekeeping in New Zealand. Having
subscribed to most bee journals pub-

lished in the English language during
the past 38 years, I have kept abreast
of all movements in the beekeeping
world during that time, and am there-
fore able to form a fairly correct esti-
mate of the state of our beekeeping as
compared with that in other countries,
and I have no hesitation in saying that
we lead the world in beekeeping. I
am aware it is a big claim to make,
but when we consider that no other
country has such an effective Apiaries
Act for controlling disease, or such
compulsory Regulations for Govern-
ment Grading of all honey leaving the
country, annual registration of Api-
aries, and supervision over all
imported bees, besides permanent In-
spectors of Apiaries who are constantly
travelling from apiary to apiary. I
don't believe it will be thought an idle
boast; and with regard to Apiary
Appliances, we are in the forefront
with these.

As to the future there cannot be a
doubt. The strides that the industry is
now making, with an assured overseas
market for our surplus honey, warrant
our younger beekeepers launching out
in all good faith in the future develop-
ment of a prosperous industry.

The official figures given by the Hon.
Mr Rhodes at the opening of the Bee-
keepers' Conference in June, 1915,
were encouraging: Numbers of bee-
keepers in New Zealand the previous
season, 11,200; number of hives of
bees, 74,340; value of output of honey,
£50,000; and the industry only in its
infancy under the new conditions. It
is expected that these figures will be
doubled in a very short time.

In order that the oldest of my bee-
keeping friends may have a copy of
these jottings in handy form, I have
had a limited number reprinted for
private circulation only.

With fraternal regards,

I. HOPKINS.

Auckland, N.Z., March, 1916.

Forty-two years of beekeeping in New Zealand — 1874-1916

SOME REMINISCENCES

By I. Hopkins

THE IMPORTATION OF THE HIVE BEE INTO NEW ZEALAND

Previous to the year 1838 no variety of the hive bee (*Apis mellifica*) existed in New Zealand; consequently the earliest settlers could not avail themselves of any portion of the abundance of nectar so freely secreted in the native flora. There are two varieties of the bee family indigenous to the country, neither of which are of any use as honey bees. The smaller of the two (*Dasycolletes purpurens*) is common in the Auckland Province. On March 13, 1839, the first hive-bees were landed at Mangunga, Hokianga. They were brought from England in the sailing ship "James" by Miss Bumby, sister of the Rev. J. H. Bumby, one of a party of missionaries. There were two colonies, in straw skeps. It may be of interest here to note that for over fifty years the late Rev. W. Cotton, chaplain to Bishop Selwyn, was credited with introducing, in 1842, the first bees into this country, and in the earlier editions of my "Bee Manual" I recorded this error. I subsequently received proof of Miss Bumby's importation, and also that of Lady Hobson from New South Wales in 1840, which I duly noted in later editions.

Some few years ago I had access to some apiary notes made by a near relative of Miss Bumby, in 1843-5, which, in the light of modern beekeeping, seem rather quaint. The following is a specimen of the notes:

No. 1.—KING HENRY VIII.

From Miss Bumby's original stock. The queen swarmed December 27, 1843. New swarm October 3, 1844.

		Weight of Honey Taken.		
1844		lb. oz.		Swarm.
				2
Mar. 18	.....	3 4		Edward.
				3
July 13	.....	28 0		Marianne. Sept. 24, 1844.
				4
Oct. 2	.....	4 8		Samuel.
Dec. 23	.....	10 8		Oct. 10, 1844.

1845

				5
				Henry.
				Oct. 13, 1844.
Mar.			Died	Died off.

It would seem by the above that honey was taken both in summer and winter, and that the greatest take was in winter, the total returns from King Henry VIII. for 12 months being 46¾ lbs. of honey, and four swarms.

It may here be mentioned that the Rev. W. C. Cotton was the author of a very interesting bee manual, "My Bee Book," of some 368 pages. He also published about the year 1844, "A FEW SIMPLE RULES FOR NEW ZEALAND BEEKEEPERS.

"(1) Be anxious to increase your stock at first rather than to take a large quantity of honey.

"(2) Get well acquainted with your bees, and make them acquainted with you. Handle them gently, and do not blow on them. Leave them alone when they are cross.

"(3) Always in swarming time have a spare hive at hand.

"(4) If you have boxes to pile one on top of the other, never disturb the lower box, except when, after two or three years, the combs have grown old and want renewing; then, late in the autumn, when the breeding season is over, take the combs away from the lower box instead of the second.

"TO TAKE HONEY.

"(5) Take off the cover, blow some smoke into the upper box between the

bars to drive the bees into the lower box. Have a table ready, with a cloth upon it; lift the box on to this, and carefully cut out the outside combs, stopping directly you come to those which have brood in them. Return the box with the brood-combs undisturbed. This may be repeated as often as you see through the window (of the hive) that the honeycombs are sealed over.

"(6) After the breeding season is over all the boxes except the lower one may be entirely emptied in situations where, as at Paihia, the bees work through the winter.

"(7) Keep a stock book regularly, and write down immediately anything curious which is observed.

"(Signed) William Chas. Cotton."

The above rules were no doubt the best that could be adopted by New Zealand beekeepers at that time, and the system advocated was at least a great advance on that of the sulphur pit method, though quite out of date now. Rule 7, however, concerning an apiary register or note book, will always hold good.

THE FIRST NEW ZEALAND BEE MANUAL.

Somewhere in the early part of the second half of the last century a useful little manual, with the title of "How to Manage the Honey Bees in New Zealand," compiled by an Old Beekeeper, and revised by H. J. Hawkins, Belvedere Nursery, and David Hay, Montpellier Nursery, was published by Geo. T. Chapman, Auckland.

The practical part of this little work covers some 45 pages, and was fully up to date at the time it was published. The bar hive — not the bar-frame hive — was the most advanced form of hive then in use, from which the honeycombs had to be separated from the sides with a long knife when taking honey; bar-frames as we know them now had not then been invented. Notwithstanding, however, all that the Rev. W. Cotton and a few others had done to awaken an interest in the most humane system of beekeeping in New Zealand, the old, cruel and wasteful sulphur pit method was generally practised down to the year 1880, when things took a turn for the better, although the sulphur pit was still largely in evidence until some eight or nine years ago.

PRIMITIVE BEEKEEPING.

As I have already intimated, beekeeping in New Zealand for very many years after the introduction of the hive-bee, speaking generally, followed the primitive methods in vogue among the cottager class in Britain and other parts of Europe at that time. Common boxes with crossed sticks running through them to support the combs were the common form of hives, though a few settlers who had been familiar with and made straw skeps in the "Old Country", adopted that style of hive here. During the first years of my travelling among our beekeepers as Government Apiarist, I came across several lots of well-constructed skeps. They were made of twisted straw laced with split supple-jack cane, and were very neat and cosy-looking. It grieved the owners very much when they were compelled to do away with them and adopt the more serviceable frame hive.

A prominent feature of this primitive hive system was the sulphuring of the bees at the end of the season to obtain the honey they had stored. A small pit was dug a foot or so in depth; half-way down two cross-sticks were placed, on which some sulphured rags were hung, a match was applied to the rags, and the box containing the bees placed over the hole, covered by a sack. In a short time the sulphur fumes killed the bees, and what honey was in the box could be removed with safety to the owner. There were a few individual exceptions to this style of bee-keeping, settlers who had profited by the teaching of the Rev. W. Cotton, and secured the honey without destroying the bees, but the majority used the sulphur pit.

THE HONEY MARKET IN THOSE DAYS.

For some years after I came to New Zealand, 51 years ago, the only honey I saw for sale was what the Maoris hawked about in old kerosene or some other old tins. A conglomeration of honey, wax, and bee grubs (the latter was considered a delicacy by the older Maoris), all mixed together, usually obtained from bee nests in the bush, which were plentiful in those days. Occasionally strained honey, free from wax, etc., would be

offered, but as it was generally believed (and with good reason) that the straining cloths used by the Maoris were parts of discarded blankets that had served as body wrappers in the heyday of their usefulness, the vendors found very few customers among the older colonists. The first honey I remember seeing on the market properly put up in tins, was in 1868. I cannot now say whether it was imported or of New Zealand production; at all events, it was horrible stuff, wherever it came from. I was no connoisseur of honey at the time, but the nauseous taste made me remark: "If that is honey, I never want any more of the so-called 'Nectar of the Gods',"—the rest was thrown away. I, however, later on discovered the true flavour of honey after I became a beekeeper and produced it myself, and have been a consumer ever since.

Some time in the '70's I heard of an extensive box-hive apiary established near Gisborne, and was informed that the method of taking honey was to cut out the honeycombs from the boxes and dump them into a large tank (in which, I presume, a strainer had been fixed) to drain. When the drainings had well-nigh ceased, a man with bared feet tramped about on the combs to press out as much as possible of the remaining honey. It was then put up for market in small tins, and, so far as I am aware, this was the only apiary that we may term a commercial bee-farm then in New Zealand. Possibly some honey was imported in those days, but if so, it must have been in small quantities, as I never saw any served up at meal times; in fact, the majority of families only used a little occasionally as a medium for children's medicine, such as "borax and honey", etc.

BEEKEEPING IN OTHER COUNTRIES.

The leading beekeepers in most European countries had endeavoured from time to time to improve upon the old and wasteful methods of beekeeping, and had to some extent succeeded, but it is to America we owe acknowledgement for the greatest benefits received in this direction. Many of our best apiary appliances were invented by enterprising American beekeepers, and others have been vastly improved in that country. Our

popular form of movable-frame hive came from there, and our comb-foundation was brought to its present state of perfection in that country; in fact, there is scarcely one article comprised in an up-to-date apiary outfit but what owes its best features to American ingenuity. It is not necessary to go into particulars of dates, etc., of the different inventions; it will be sufficient to say that the crowning point came with the invention of machinery by A. I. Root and another in 1876-7, that turned out full sheets of comb-foundation with high side-walls, in almost the same condition that we have it now. I have always considered that what is usually termed "Modern beekeeping" commenced at that date, for without such comb-foundation the full benefit of the movable frame-hive could not have been gained.

THE FIRST STAGE OF PROGRESS IN NEW ZEALAND.

When I first took a practical interest in beekeeping, early in 1874, no one in New Zealand, so far as I could learn, knew anything about the progress of the industry in other countries. I had gathered from scraps I had read that much had been done to get out of the old ruts, but could get no information that would guide me beyond a gin-case hive — the first kind I adopted, at the Thames, where I then lived. I was most anxious to learn the best methods, as I very early conceived the possibility of bee-farming being made a profitable business in New Zealand; the country seemed so well adapted for it. My enthusiastic talk about taking up beekeeping as a business, and raising tons of honey, gave my intimate friends the impression that I was really going off my head and becoming a fit subject for an asylum. Later on, when I had started with all the latest appliances, they admitted that I must have had method in my madness. In looking back I can quite understand that under the then conditions of beekeeping knowledge they had good reason for their supposition.

I had what I may term very good success with my gin-case hives, and by boring several good-sized holes in the roof of them, I was able to get boxes full of clean honey and comb, which I had placed above. From information gained from a publication,

"The Cottage Gardener," I constructed bar-hives, that is, boxes with movable bars (not bar-frames) running across the tops, and movable covers — the "Stewarton," "Carr-Stewarton," and others. They were a slight improvement on gin-cases, as there was better communication between the lower and upper boxes, but were not the thing.

THE FIRST MOVABLE-FRAME HIVE IN NEW ZEALAND.

The very first movable-frame hive seen in this country was one sent by a friend in California in 1876, to the late Mr G. S. Graham, of Auckland, who was interested in beekeeping. Captain Wildman, of the Thames, was an intimate friend of Mr Graham, and he presented me with two duplicates of this hive he had made for me immediately after the original landed. It was known in California as the "Harbison" hive, after the name of one of the original and most extensive beekeepers of that State, who was using such hives. It was, however, as I afterwards discovered, a German hive, made and used by the Baron of Berlepsch, and known as the "Berlepsch hive." It consisted of a long box standing on end, with a door at the back, exactly like a small cupboard; the movable-frames were in a compartment at the bottom; it was a difficult job to remove them. I gave them a trial later on, but soon discarded them.

FURTHER PROGRESS.

In 1878 I learned through a correspondent to an English journal, who was then residing in Algeria, something of the doings of A. I. Root in America. I at once communicated with the latter, and received in return a copy of "Gleanings" and his price list. In the meantime, I had sent to London for the best bee book obtainable, and to my intense delight received a copy of "Langstroth on the Honey Bee." An order for a comb-foundation machine, honey extractor, smoker, and several other appliances was sent at once to Root. In the interval before their arrival I set about making a number of Langstroth hives, so that when Root's goods arrived I was all ready to set up a fully-equipped modern apiary, the first of its kind in Australasia.

It took some little time even after receipt of the new appliances from

America to get thoroughly underway, so that it was at the commencement of the season of 1879 before the whole of my apiary of fifty colonies was fully established on modern lines. My first 100 Langstroth hives were cut and made by hand (mostly at night time), but subsequently I arranged with Messrs Bagnall Bros, of Turua, sawmillers, to cut them by machinery, which they have continued to do ever since.

The first thing needed after the arrival of the machine for making it was comb-foundation. By the way, this machine cost me £14 landed in Auckland, and was, I believe, the second one to leave the United States, the first going to the late Mr Raitt, of North Scotland.

I well remember my first attempt— with the kindly aid of Mr W. Dey, now of Hamilton, Waikato — to make comb-foundation. Although we worked closely to the printed instructions received, and with proper utensils, everything went wrong, so much so that at the end of a strenuous day we had succeeded in covering ourselves and surroundings with wax, and had turned out the large quantity of three pounds of comb-foundation that was usable. Subsequently, with enlarged boilers, I have turned out 200 lb in the same time. After a while everything worked along smoothly and successfully, and "The Apiary" at Parawai, Thames, became a notable visiting place. The then county chairman, Mr Walter Brodie, used to bring along every noted visitor to the Thames — at that time a flourishing district. The late Sir George Grey visited the apiary more than once, and was greatly interested in the new method of beekeeping. He promised me a number of exotic plants, great nectar yielders, he had introduced, and were growing on his island of Kawau.

The late Mr C. T. Wren, nurseryman, of Remuera, Auckland, had sent to A. I. Root for bee goods towards the latter part of 1879, not at the time being aware of what I had already done. When a friend informed him he paid me a special visit, and while congratulating me on being first in the field, expressed his disappointment at not being first himself, as he fully expected to be. Mr Wren was afterwards my Auckland agent.

THE FIRST HONEY RAISED UNDER THE NEW SYSTEM.

Unfortunately for my prospects of raising much extracted honey, my apiary was too near the bush which covered the hills adjacent, and from which the bulk of my honey was gathered. Nearly all honey from mixed bush is too dense to extract from the combs in the ordinary way; it was so in my case, and I could only secure a comparatively small quantity with the extractor. I therefore turned my attention to the raising of comb-honey in one-pound section boxes, which sold well at 10/- per dozen wholesale; in fact, the demand exceeded the supply for a long time. Speaking of section boxes reminds me that at the time mentioned they were in four pieces, which had to be nailed together, a most difficult job, and when many thousands were on order, made up, some idea of our difficulties of pioneering will be realised.

THE FIRST CONTRIBUTIONS ON MODERN BEE CULTURE TO THE PRESS.

In 1879 I was in possession of all the most notable bee books of the time, including Root's "A.B.C. of Bee Culture," in parts, as it had then been published in "Gleanings in Bee Culture," "Langstroth on the Honey Bee," "The Times' Bee Master," "Bevan on the Honey Bee," the Rev. J. G. Wood's little work, and one or two others; but only "Langstroth" and the "A.B.C." were of any service as regards the new methods of bee management. These, together with copies of "Gleanings," the "American Bee Journal," and "British Bee Journal," which were reaching me regularly, I studied very closely, so that by the close of 1879 I was well versed in everything that had been done in advanced bee culture.

Early in 1890 the then editors of the "Thames Advertiser" and "Auckland Weekly News" asked me to write a series of articles on the new system of bee culture for their papers, which I did weekly for six months, explaining the complete system. Evidently the papers had a large circle of readers, or the articles were copied into other papers, as in a very short time letters began to pour in from all quarters of New Zealand and Australia asking if

I could supply the hives and appliances mentioned, or tell the writers where they could be obtained. This suggested to me the idea of running a supply business with my apiary in the meantime until the opportunity came to go into bee-farming on a large scale.

A SUPPLY BUSINESS

Having arranged with Bagnall Bros for a large supply of hives and frames, as well as section boxes, I soon had a big trade, with half a dozen men at work. We sent hives and all other appliances to Australia and all parts of New Zealand. I was then running an apiary averaging 60 colonies — the maximum often reaching 80 — which necessitated me working from 4 a.m. till 10 p.m., and often all night. My working capital, owing to a previous heavy loss, was very small, hence my having to work long hours to recover myself.

My supply business brought me into intimate relations with some very fine gentlemen residing in all parts of Australasia, who were more or less interested in beekeeping. The friendly relationship of several who have not since passed over to the great majority, continues to this day. Quite recently Mr Chas Fullwood, formerly of Brisbane, but now of Melbourne, one of my very earliest customers, called upon me while on a visit to this country. This friendship I prize very highly.

INTRODUCTION OF ITALIAN BEES INTO NEW ZEALAND.

Writing Root in 1879 re his sending me one or two colonies of pure Italian bees, his reply, which I have before me, dated June 3rd, 1879, advised me, as being the most convenient and safest for the bees, to apply to Mr R. Wilkin, San Buenaventura, California, who could supply me. This necessitated some delay while correspondence passed between us, otherwise I would have had Italian bees early in 1880, or most likely at the latter part of 1879. As it was, however, I did not receive my two colonies till after two colonies had been landed from California to the order of Mr J. H. Harrison, of Coromandel, and the Canterbury Acclimatisation Society, one for each.

My two colonies, in the first place, cost me 10 dollars (£2/1/8) each at San Buenaventura, to which must be added \$5.75, freight and sundry expenses from San Buenaventura to San Francisco, and \$10 freight from San Francisco to Auckland each colony, making in all £9/10/6, all of which had to be paid in advance, but fortunately the bees arrived safely and in good condition. I, of course, started at once to breed queens, and Italianise my apiary, and by the close of the season 1881-2 I had 45 pure Italian colonies, and a number of hybrids or crosses. At that time it was difficult to get purely-mated queens, as there were so many black bees about, and it was only by breeding plenty of queens and constantly weeding out the mis-mated ones, that one could get his apiary Italianised.

FIRST EDITION OF "THE NEW ZEALAND BEE MANUAL."

After the close of my Press articles, I was requested to bring them out in book form, and in September, 1881, the first edition of my "Bee Manual" was published. It took well, and just 13 months after, a second edition was brought out. The book had a large circulation in Australia, and being as suitable for that country as this, when the third edition was called for I altered its name to that of "The Australasian Bee Manual," under which title it is registered.

STARTING THE FIRST COMMERCIAL BEE FARMS AT MATAMATA.

My business grew very rapidly, the demand for the new beekeeping appliances kept my staff very busy. There was also a large demand for colonies of bees, and that for Italian queens was growing, but notwithstanding I had the prospect of a large business in front of me, my interest was centred in bee-farming on a large scale, not in the supply trade. I had frequently declared that honey could be raised in tons under the new method, and was laughed at for talking nonsense; this made me determined to prove it at the earliest opportunity, and that opportunity came earlier than I had anticipated.

In the first months of 1882, the late Major T. L. Murray, who was then manager of the Thames branch of the Bank of New Zealand, and who

took special interest in the new bee-keeping, told me about the magnificent crops of white clover blossoms he had recently seen at Matamata, extending for many miles in all directions. The whole country, he said, when viewed from the neighbouring hills looked as if covered with a thin layer of snow, and suggested my getting permission to establish a bee farm on the estate. The late Mr Will, the then editor of the "Auckland Weekly News," who had also visited Matamata, told me about the clover, and he, unknown to me, suggested to the late Mr J. C. Firth, the owner of the estate — which comprised in all 87,000 acres — that he should engage me to establish one or more bee farms on his property amidst the white clover.

The description given me of the large area of white clover set me longing to be there with my bees, as I pictured to myself the number of out-apiaries that could be established; in fact, I concluded that there would scarcely be any limit to the number of colonies that might be kept. While this was uppermost in my mind, I received a letter from Mr Firth, much to my surprise and delight, stating he would come to the Thames to see me about establishing a bee farm at Matamata. When we met, I found him very eager to start bee farming on his estate. It then became a question to him of getting bees and someone to manage them, and as I was the only person who had a goodly number of colonies available in frame hives, and being the only one who understood the new system thoroughly, he made me a very good offer to go myself and take my bees, and as many more as I could get.

I wanted, of course, some little time to think over it, and to visit Matamata before I could decide one way or the other, as it would mean giving up my business — though I was anxious to go, and hoped everything would be favourable. Eventually everything was arranged for my going, my business was passed over to Messrs Bagnall Bros and Co., and I left the Thames with all my bees — 45 pure Italian colonies, and about 10 cross-breds — and appliances in Mr Firth's steamer for Matamata, in August, 1882.

THE MATAMATA APIARY.

The homestead of the estate was situated about seven miles from the landing, on the Waihou River, where my bees were transhipped from the steamer to wagons. The spot chosen for the home apiary was about 400 yards from the homestead, in a naturally sheltered spot. A house and large workshop, with honey house attached, had been erected close to, so that in a few days the apiary was fully established. The apiary being comparatively small, I was anxious to purchase some colonies, and eventually arranged with Mr Parsons of Te Awamutu, and Major Jackson of Kihikihi, to sell me all the colonies they could spare. Mr Parsons' bees were in small frame hives of his own construction (not Langstroth hives), and Major Jackson's thirteen colonies were in Berlepseh hives; in all I secured fifty colonies. These were packed on a four-horse wagon. We reached Cambridge the first night and Matamata the following afternoon, without the least mishap, although parts of the road were so bad that the wheels sank in ruts up to the axles, and we had to use a spade to clear them.

In due course the bees were all transferred to Langstroth hives, so that at the commencement of the season I had about 100 colonies of a mixed assortment of Italians, hybrids, and black bees. All the pure Italians were kept at the home apiary, and with the others I established

THE FIRST OUT-APIARY.

As my first object was to increase the bees and to Italianise all I had bought, I gave little attention to the taking of honey the first season, so that only 1 ton or so was secured for use on the station, and as presents to friends. The following season of 1883-4 ten tons were taken from 200 colonies in the out-apiary (that is, 150 spring count, increasing to 200 colonies), and this was about the average yield while I remained at Matamata.

Unfortunately, however, for bee-farming, the land at Matamata soon got "clover sick." White clover would grow magnificently for about three years and then die out completely. This was a great disappointment to everybody, especially to me, as I had

expected to establish at least six or eight out-apiaries.

IMPORTING HOLY LAND QUEENS.

Little was known of a practical nature concerning several varieties of Eastern bees other than Italians, hence the glowing reports circulated about them at the time. So much, however, was thought of some varieties, that Mr D. A. Jones, of Canada, accompanied by Mr Frank Benton, of the United States, went to Cyprus and India in 1879 to investigate them. Mr Benton eventually established an apiary of 100 colonies in Cyprus for the purpose of rearing Cyprian queens for export to Europe and America. Subsequently he established apiaries in Palestine, Carniola, and other Eastern places, for raising queens of the several varieties.

Naturally I was very anxious to test these Eastern bees of which so much had been said in their favour, and knowing Mr Wilkin, of California, with whom I had previously dealt, had some in their purity, I sent to him for five nuclei of pure Holy Lauders and five of Cyprians. My order went forward in June, 1882, and on August 24, 1882, the ten nuclei, crated together, were shipped by Messrs Stearns and Smith of San Francisco, reaching me safely the following month. He was, however, unable to send me Cyprians at that time, so those that came to hand were five pure Holy Lauders, and five crossed Holy Lauders — Italians.

OFFICIAL PERMISSION TO SEND QUEEN BEES THROUGH THE POST.

As I anticipated doing an extensive queen trade, it was necessary — as there were some restrictions with regard to sending live animals by post — to get permission to send queen bees by mail. I therefore prepared a specimen shipping cage, which was sent through Mr J. C. Firth to the Postmaster-General, Wellington, on October 9th, 1882, together with a request that queen bees, with their accompanying worker bees, be allowed to go by post. To this request the following reply was received — the original of which I have before me:—

Post Office and Telegraph Dept.,
Wellington, October 20, 1882.

Sir,—The Postmaster-General has very much pleasure in authorising you to send queen bees through the post in the boxes (shipping cages), of which you sent a specimen with your application of the 9th inst. Postmasters will be instructed to take every care of the packages.—I have the honour to be, Sir, your obedient servant,
(Signed), W. GRAY, Secretary.

THE FIRST COMMERCIAL QUEEN REARING APIARY IN AUSTRALASIA

Before leaving the Thames I had supplied Italian queens, but chiefly locally. Orders, however, were coming in from distant parts during the winter of 1882. These I took with me to Matamata to execute from there. As soon as the season set in I raised both Holy Land and Italian queens for sale, and issued a price list. During the season of 1882-3, and subsequently, queens were sent to all parts of New Zealand as well as to South Australia, Victoria, New South Wales, Queensland, Tasmania, and later on to several of the South Sea Islands. With the exception of Queensland, those queens I sent were the first of the kind seen in the several colonies.

Considering the difficulty encountered of late years in queens travelling safely when caged for some days, it may be well to mention that I do not remember one loss in the mails, even when sent to Australia, although in those days the queens had to take their chance in the closed sacks with letters, etc. On one occasion a queen sent to South Australia was 22 days on the trip, caused by some unaccountable delay of the package in Sydney. Two letters arrived from the beekeeper—one complaining of the delay and the other stating he had received the queen and two or three bees alive. I wrote him at once that if she did not turn out satisfactory after her long confinement I would send him another. Subsequently he wrote me that she quickly recovered and was doing well.

My queen trade developed very rapidly, and for a considerable time the home apiary of about 60 colonies, and (in the season) some 75 nuclei, was chiefly devoted to the breeding and testing of Italian queens for home use and for sale.

THE TRADE IN COMB FOUNDATION.

The demand for Langstroth hives and all the new bee appliances increased enormously after passing over my business to Messrs Bagnall Bros and Co. Large orders came by every mail from Australia and all parts of New Zealand. There was an extraordinary rush into the new beekeeping during the next few years. As comb-foundation was one of the chief requisites with the hives, and I was then the only person making it in the whole of Australasia, it may be readily understood that I was kept very busy manufacturing it. My difficulty was in getting beeswax fast enough for the purpose. An open order was given to the New Zealand Loan and Mercantile Agency to get every scrap of wax possible from their Australian and New Zealand branches, and to send it along as soon as their parcels reached from a half to one-ton lots. On one occasion I had to send to England for two tons to keep me going. Agents in Melbourne and Sydney were appointed for the sale of comb-foundation, and several hundred-weights were sent to them by each steamer during the spring and summer seasons. The first cwt that went to Australia was to the order of my old friend, Mr Chas Fullwood, already mentioned.

Some of the New Zealand agents, beside the branches of the Loan and Mercantile Agency were F. W. Isitt, Christchurch; J. Adamson, Hastings; R. Cock, New Plymouth; W. Tyree, Nelson; J. Barkley, Westport, and others.

COMB-FOUNDATION MACHINES.

Soon after A. I. Root placed his original 10-inch roller machine on the market several others came forward, all differing a little in some respect. There were the "Dunham," "Vandervort," "Givenpress," "Van Deusen Flat-bottom Machine," "Pelham" — all American — and a very expensive English machine made of brass. I imported and had in use at Matamata, in addition to the Root machine, all the other Americans, with the exception of the "Pelham," which my friend, Mr G. A. Green, now a leading nurseryman of Auckland, had imported and lent me for a while, so

that I had six machines in use. They were really under trial to see which was the best. My choice eventually fell upon the Root, though for very thin section foundations I preferred the "Van Deusen" machine, and kept to that till I gave up business.

The improvement made in the Root machine from time to time kept it ahead of the others, till eventually it superseded all of them. My friend, Mr George Stevenson, of Gisborne, was early in the field with a "Givenpress," which he always believed in. I must confess it was a failure with me. I could make three times the quantity of better foundation with a roller machine than with the press, in a given time.

A NOVEL FOUNDATION MACHINE.

While on the subject of comb-foundation machines I am reminded of a very novel one. Not long after I received my first one, Mr John Blair, of the Great Barrier Island, paid me a visit at the Thames. I remarked after he had gone that he seemed more interested in the comb-foundation machine and the making of comb-foundation than in anything else. Some time after I learned that he had made a machine which answered the purpose; it was ingeniously constructed of two wooden rollers studded with hob nails.

ADULTERATED BEESWAX.

Two or three Auckland firms who had country connections used to buy up all the wax they could get. It came forward in small parcels, from 5 or 10 lb up to 30 or 40 lb, and was generally bought by barter — exchanged for other goods. The price given was from 6d to 7d per lb for clean wax. When the parcels had accumulated to several cwts it was shipped to England, where double the first cost or more was obtained for it.

After I got properly under weigh, and was buying up all the wax I could get, the price went up to 9d and 10d in a very short time. Some cute individuals then thought it worth their while to resort to adulteration. At first it was carried out in a very crude manner, easily detected. Mutton fat (tallow) was the adulterant. This, however, gave the wax an unnatural pale colour, and a greasy feel when handled, so that it could be detected

at once. On one occasion I was victimised and put to considerable loss over adulterated wax.

Three or four sacks of wax reached me at the Thames sent by an Auckland firm with whom I had had many previous transactions. I was on the point of leaving with a large exhibit of bees and bee material for the Auckland Spring Show, and as I had many orders on hand for comb-foundation my wife, who had assisted me many times to make it, undertook, with the aid of a stout lad, to have plenty ready to fill orders on my return. I was away a week, and on my return found Mrs Hopkins in great trouble. She had about a couple of cwt of sheets ready, but could not get them through the rollers of the machine: the sheets seemed "rotten" She had been trying off and on for two days, and did not get one sheet through. As it was dark, and I was tired, I said I would investigate matters in the morning, cheering her up by saying it was simply a matter of adjusting the rollers.

The next morning at daylight I tackled the job, but with no better success, the wax sheets, as my wife had said, were simply "rotten," and would not hang together to go through the machine. Luckily there was some wax still left in the sacks, and on investigation I found a lot of it adulterated with tallow, hence the cause of the trouble was revealed. A week's work gone, and a big loss beside. If I had examined the wax before I left the trouble would not have occurred; it taught me a lesson I profited by afterwards.

COMMERCIAL ADULTERATION OF BEESWAX.

As the demand for beeswax increased, so the price advanced, and when it had reached over 1/- per pound, wholesale, the temptation for fraud brought some very clever imitations of the genuine article into the field. The old clumsy system of tallow adulteration was a thing of the past; the later fraudulent substance was infinitely more difficult to detect.

To be continued

A bee sting is only one-twelfth of an inch long, and its temperature is that of its surroundings. The extra four inches and 500 degrees are due to the imagination of the recipient.

NEWS FROM LEADING BEEKEEPING

THE SCOTTISH BEEKEEPER

The Official organ of the Scottish Beekeepers' Association. Annual membership £2.50 sterling, includes magazine. Editor: Mr J. F. Smith, 23 Taybank Drive, Ayr, KA7 4RL Scotland.

Some references to Bees and Beekeeping in S.W. Scotland

The following list of references to S.W. Scottish Beekeeping is taken from the "Scottish Gallovidian Encyclopedia or the Original, Antiquated and Natural Curiosities of the South of Scotland." This was written by a John MacTaggart (1800-1832) of the Parish of Borgue, Kircudbrightshire, and published in London in 1824. It takes the form of a dictionary giving the meanings of common Galloway words interspersed with short sketches of Galloway celebrities, descriptions of places, curious anecdotes, and original or borrowed pieces of poetry. It is, however, MacTaggart's ability to describe accurately the everyday events and ideas of peasant life in his native parish which makes his references to beekeeping so interesting to the modern beekeeper.

Bees in the Brain. — People, after they have been "fu'," feel, as they are returning to their wits again, a bizzing and "singing" in the head, which are called the "bees o' the brain"; also, when they get intoxicated, they feel these fanciful insects.

Bee-Skeps. — Baskets made of straw and briers, as houses for bees; when a hive needs one of these mansions, it is rubbed with green leaves and old honey in the inside; then peeled sticks are put across it to support the combs, and a standard post down the middle. And if this work is done before the hive needs it, the people say, "they'll no need it that year, as bees like naught done a forran." Sometimes rascals of beemn est "toom-skeps" in the gardens, to allure other people's hives into them. Such characters never thrive though on a "kintra-side".

Bee-Stanes. — Stones in the form of a sector, to set bee-hives on.

Bee-Yards. — Apiaries for bees. Quarry-holes fronting the south make the best bee-gardens.

Borgue-Hinnie. — Borgue Honey. This article is of such good quality, that the fame of its excellence spreads far and wide. In London there is a sign, with "Borgue-hinnie for ever", wrote on it.

Broolzies or Boozles. — Rows in the rural world. MacTaggart illustrates this point by producing a poem of sixteen stanzas entitled "The Bee-Hive". In this he describes the trial and tribulations of beekeeping — especially swarming.

Brunstane Cannles. — Matches made of paper and brimstone to suffocate bees.

Bumbees. — The wild humble bees. There are three kinds of these bees common in Scotland — the black, the "braw-net", and the brown. The first has its nest deep in the ground, and they are generally found in very large colonies together; the second build and breed under ground too, but not so

PUBLICATIONS AROUND THE WORLD

deep as the others; and the third, or brown, always on the surface. The sting of a wild bee is not so venomous as that of a tame one, neither are the bumblebees so fierce as the others; but will fly buzzing round and round, and seldom dart into sting — their "bykes" are robbed for common, without much trouble. The honey of "bumbees" is also quite weak and watery to that of the others; nor do they display great handy work in the formation of their combs; theirs are no hexagonal tubes, but dirty globular figures; they are no craftsmen in truth, nor yet near so nimble as the others in comparison; yet who does not love to hear them in the spring "bumming" amongst the "sillarsaughes wi downie buds," or the opening leaves of the "plaintree". In an old riddle the three kinds are thus specified—

"As I cam owre the tap o' Tyne
I met a drove o' Highlan' swine;
Some o'm black, some o'm brown,
Some o'm rigget owre the crown;
Sic a drove o' Highlan' swine,
I ne'er met on the tap o' Tyne".

Bykes. — Bee-nests; also nests of angry people.

Castin o' Bees. — Bees are said to be "castin", when they are swarming. Sometimes, when the insects are in this state, they fly far away from their parents before they hive or alight, in spite of all the pistols that are fired and water that may be thrown amongst them by their watchers, which is the cause of many a warm race to the rustics. The poem the "Bee Hive" illustrates a haunt of this kind (see under Broolzie mentioned earlier).

Hinnie-Pigs. — A school game; also pots to hold honey.

Hiving-Sough. — A singular sound bees are heard to make before they hive or cast, or leave their parents. Only "Bee-fowk" who understand the nature of the insect well, know anything about this "sough" or sound. It is commonly heard the evening before their departure. The bee's "bonello" probably it may be. It is a continual buzzing hum, full of melancholy-like cadences. While on bees, I may note a few of the many curiosities respecting them, unspoke of by "Virgil" in his "Georgics"; Bonar, or anyone else. When a swarm intends to have a long flight, they gather close together into the space of a few yards square, or, as the peasantry say, into the "breath o' a gude grey plaid". When they assume this figure, it is vanity to follow them. This is the method they take of "easing their flight", a plan Poet Milton discovered, respecting wild geese, and other migrating birds. And what is singular, bees, in this state, always wing their way right against the wind; now, know they were they intend to journey to before they start, or fly they at random? If they know the place, then they must look out for a fair wind, though with us that is a "head" one, in present maritime law; but methinks, at these times they know not where they wander, as frequently they alight on a spot open to the elements, and so perish, whereas they might have easily found a snug place. Bees taken to the forrid zone, do well the first year, but learning there is no winter, but summer for ever, they soon turn lazy, as when brought from the Moorlands to the Dale. Some fancy we may take honey from them without killing, but this cannot be done. Let Bonar reason as he will. Mine original "Mossie Cloon" would once turn a Bee-man, so follow one through the country awhile, to learn the trade of "taking" and "leaving" a part. At last he thought himself fit for the trick, so a friend would let him try; a crowd gathered round, and "Mossie" began

operations. The bees became crusty; out they rushed in legions, vowing revenge. The mob of spectators fled; friend James was indeed the last to fly, but had to do it, and to take his bed for some time after, being so stinged, and never more would he profess to be a "Beerman".

Kaims. — Honey-combs.

Merlie. — Sandy and sweet; when honey is in this state, it is said to be "merlie"; when it is beginning to grow this way, it "merles"; and when it is let go on, it is "merling".

Skepping Bees. — The art of putting bees into their houses when they hive.

THE COST OF PRODUCING HONEY

Our readers are already well aware of our interest in obtaining a realistic estimate of the costs of producing honey in this country. All sorts of figures have been offered to beekeepers by 'authorities' — so called — but it has been rarely that anything like an exact study has been made.

We are fortunate in that our professional training required a qualification in accountancy, including cost accounting. For this reason, most of the attempts made at costing honey have appeared to be so absurd as to be valueless. Some months ago we published some of the figures we had worked out in conjunction with a few beekeepers who kept careful records and in which we had the assistance of a professional colleague, who is a practising cost accountant. It did seem to us that we were voices crying in the wilderness!

Now, however, we have a detailed study carried out at Clonroche in the Republic of Ireland. An excellent report appeared in the May issue of "The Irish Beekeeper" and written by P. Donnellan (An Foras Taluntais).

Clonroche is a beekeeping experimental station and commercial honey production began there in 1966 with 75 colonies. Figures are provided for the years 1966-72 (inclusive). 1972 was the poorest year from a honey production point of view, this was because the apiary was found to be heavily infected with both acarine and nosema. Disease greatly affected honey production, yet a mean production (arithmetical mean) of 38 lb of flower and 8 lb of ling honey per colony was achieved in these difficult circumstances. The best year recorded was 1968 which produced a mean of 94 lb flower and 9 lb ling per colony. Over the seven years the mean for flower honey was 62 lb and heather (five years only) 10 lb. This gave a total mean honey production of 70 lb per colony. Even by 1972 prices obtained are remarkably low, flower honey being sold at 23 p. per lb and heather 36 p. per lb. This gave a net income per colony of £10.52 (\$N.Z.16 at current exchange rates).

One of the most vexed questions in cost consideration is labour. Obviously the commercial beekeeper will keep the time factor per colony to a minimum, while the hobbyist beekeeper likes to spend time on his bees. Sometimes, as wives know only too well, needless hours are spent at the apiary or in the workshop and these "play" hours must be eliminated from all cost consideration. The Clonroche figures show that six visits were made to the apiaries during the months of June and July with a total of 94 man hours, or 74.4 minutes per colony — just under 13 minutes per colony per visit.

The report contains much more useful and helpful information and Clonroche is to be congratulated on its careful study and "The Irish Beekeeper" equally congratulated on publishing this important study.

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"The Scottish Bee Journal" is in no small measure pleased to find that someone else has arrived at comparable figures.

An average of 60 lb of flower or a total average of 70 lb production per colony — or even the 'bad' year of 1972 with its lowly 46 lb per colony makes utter nonsense of the figures which have gained so much 'authority' in Scotland.

GLEANINGS IN BEE CULTURE

A monthly magazine, generously illustrated featuring timely articles on Beekeeping practices in the United States. Subscription \$U.S.4.75 per year; 2 years \$U.S.8.75; 3 years \$U.S.12.20. Sample on request. The A. I. Root Co., Medina, Ohio 44256, U.S.A.

MAKING INCREASE BY SPLITTING

My brother, Bill, has already given a somewhat humorous (as he sees it) introduction to our initiation into the bee business (Oct. 1971 Gleanings in Bee Culture) and despite the multitude of mistakes, we are getting bigger each year. Let's hope our mistakes do not show a positive correlation to our increase in size.

With this expansion and our avid interest in beekeeping we are beginning to experiment with different methods of bee culture in the hope of finding ways of bringing about consistently high yields. We're in an area that is considered marginal, but we feel that with the proper techniques one might be able to obtain yields that would be significantly above the average.

This year's trial was with splitting. The number of hives used was small, only five, but the results were most interesting.

Late in May we chose five of our good hives which contained about 10 frames of brood each and as best we could, split them in two. We left the old queen with one half and introduced a new queen in the other half. Introduction was done with a standard self-release cage. The hives were begun as two deeps, and extra supers were added as the hives increased in size. Although the queens' wings were clipped, no other special procedures were carried out.

The season, as most people around here know, was quite slow, but the finish was not bad since the goldenrod came through for us as usual. At the end of the fall flow we calculated the surplus from these split hives and compared it to that of five originally comparable hives which were not split. Roughly speaking, the surplus from the five split hives (now 10) was 400 pounds compared to 300 for the five unsplit hives. This in itself is not bad since we have gotten both more honey by splitting and doubled the number of hives. But what is even more interesting is to now see what the surplus comes to if we recombine the split hives back to the original number. This gives us the winter stores of five hives which is minimally 50 pounds apiece.

With this the comparison for the two sets of hives is 650 pounds to 300 pounds, or over twice as much for the split hives. What does this mean? It means that next year Knapp Bros Apiary is going to be doing one heck of a lot of splitting.

Now let us see what is most probably behind these results and what other advantages come from splitting. First of all, in our area where we have a long build-up with good mid-season and fall flows, it actually seems of little sense to have a strong hive early in the season. By reaching peak strength early in

the season a hive will most likely eat a great deal of honey and get foolish ideas about swarming. On the other hand, the split hives spend their time during this period gradually building up so that when mid-season arrives they will together be about twice as strong as the unsplit hive and just in time for all the action. The theory of five frames of brood with bees and six to eight weeks for development of a full strength hive is obviously what is involved here, and for us, the timing works out quite well.

So much for the mechanism — how about the other advantages? Since the split hives are begun small and spend a good portion of the season building up, one could logically assume there would be less problem with overcrowding and swarming. Also, since the older queen is done away with in the fall, our split hives will always go into the winter with the newly introduced queen, and obviously each spring a new queen will be added to half of the split. This ensures requeening each year, and the advantages of young queens have been written about by many.

THE AUSTRALASIAN BEEKEEPER

The Official organ of a number of Commercial and Amateur Associations in Australia. Subscriptions: Australia and New Zealand \$A4.20 per year; Overseas \$A4.80 per year. Editor: Mavis W. Morgan, Pender Bros Pty Ltd, P.O. Box 20 Maitland, N.S.W. 2320, Australia.

STRONG DEMAND FOR QUEEN BEES

The demand for queen bees is strong as a result of the buoyant state of the world honey market.

Mr N. V. Rice, a queen breeder, of Beaudesert, Queensland, said this at a Field Day at his premises recently.

About 200 commercial and part-time beekeepers from northern New South Wales, Darling Downs and Moreton districts attended.

Mr Rice said that, in addition to sending queen bees to many parts of Australia, he exported them to Iran, New Guinea, the Philippines, Indonesia and Malaysia.

Mr Rice discussed the basic principles of queen bee breeding and took visitors on an inspection of his air-conditioned queen bee grafting room in which larvae not more than two days old are transferred to large artificially prepared cell cups to be reared into queen bees when introduced into specially prepared hives.

The modern techniques used by Mr Rice were demonstrated to the visitors.

Mr C. Roff, Chief Beekeeping Adviser, Queensland Department of Primary Industries, with the assistance of Mr D. Bate, an employee of Mr Rice, demonstrated the American Kelley boom electric hive loader. This equipment, mounted on a 6.09 tonnes (6 tons) V8 powered truck can carry 108 two-storey hives at the one time. Hives of bees with open entrances were loaded on and off the truck.

Mr Roff also showed the use of bee blower to remove honeybees from the honeycombs to enable the combs to be extracted.

He also showed the way of opening hives and various parts of the hive using a bee smoker and the correct dress.

Visitors also saw Mr Rice's factory where he manufactures frames and supers, and inspected the extracting room, and plant for waxing equipment and preservation.

—C. ROFF.

AMERICAN BEE JOURNAL

Annual subscription (Foreign): \$U.S.4.75 per year. Editor: Vern E. Stinson, American Bee Journal, Hamilton, Illinois 62341, U.S.A.

PLASTIC COMB

The "American Bee Journal" (February 1973) has an extremely interesting evaluation of Plastic Combs for Honeybees (pages 54-5) by B. F. Detroy and C. D. Owens of the U.S. Department of Agriculture. Four types of plastic comb were tested, in Wisconsin and in Arizona.

One type of plastic comb was found to suffer from deformation due to changes of temperature, and this was corrected by adding sheet-metal stiffeners to top bars. Two types were able to withstand sterilization in boiling water, but the other two were damaged in it. It was found that a beeswax coating made the comb more acceptable initially, but after use for brood rearing no preference was shown as between coated and uncoated plastic comb. Burring between combs and between supers was very marked.

There are fewer cells to the square inch of comb surface in plastic comb—20 against 25 on beeswax—because the cell wall thickness in plastic is greater, and bees draw cells of a noticeably increased diameter. Brood did not develop satisfactorily in all of the types of plastic combs when they are new: "The translucent combs without beeswax coating and the flexible plastic combs did not permit satisfactory brood development even after the initial brood cycle." The plastic combs were strong enough to withstand high extracting speeds.

In general, more research and trials will be needed to perfect plastic comb.

WILL A POLLINATION CRISIS OCCUR IN THE NEAR FUTURE?

**Dr Lawrence J. Conner, Extension Entomologist and Specialist in Apiculture,
Ohio State University, Columbus, Ohio, U.S.A.**

For years the price of honey has been very stable, and very low — around 15 cents per pound to the honey producer. This low price continued until late 1971, when the price increased — partially because of the demand for "natural foods", and partially because of low honey production world-wide. Producers now receive up to 35 cents per pound — more than double their old price.

To the honey producer, the increase in price is an overdue and welcome event. He has been using old and inefficient equipment, driving old vehicles, and using his own family for help. Few new people were attracted into beekeeping, and those who stayed in it did so because it was a labour of love. Many beekeepers had other jobs to stay in business.

During the period of low honey prices, many beekeepers found extra income through pollination rentals. Two \$10 moves would provide the same amount of income as a 133 pound yield of 15 cent honey. An average U.S.A. yield would be about 60 pounds per colony.

Now the economies have changed. At 35 cents per pound, a \$20 pollination rental equals the value of 60 pounds of honey. Because some producers figure they lose 25% of their annual honey crop with every pollination rental, and sometimes seriously weaken the colonies through lost field bees or exposure to pesticides, beekeepers renting bees have increased their pollination charge. In Ohio a \$15 charge is not uncommon, and in New York State, charges of

\$17.50 are made for apple pollination. As the laws of supply and demand dictate, as the price of honey increases, the number of producers willing to trouble themselves to rent bees decreases. And those who will rent charge more.

Good locations for honey production are rarely the same locations where pollination service is required. Although a few rentals are made for clover and legume pollination, most pollination rentals are for crops low in nectar yield. Fruit, berry, oil, and vine crops are usually less than ideal nectar plants for one reason or another. So a pollination rental almost always means a loss of honey yield for the producer.

Indeed, many crop producing areas have become bad areas for keeping honeybees. Pesticides are used frequently, and honey plants are often scarce. So beekeepers have moved to better areas. Native bees — those bees other than honeybees — cannot survive in these intensely farmed areas either. Pesticides kill them, and the ground nesting or stem nesting bees are discouraged by continued cultivation of soil and elimination of brushy areas. So rented honeybee colonies are often the only practical answer for pollination.

Recently, in talking with a major honey producer who has specialized in pollination rentals, I was told: "I guess we will have to sit down and figure out the finances of the problem of honey production versus pollination rentals. If we lose 25% of our crop with a pollination rental, we certainly must pass on this added cost to the grower — and many growers just will not be able to pay. So, we will only be able to rent bees to those select growers who pay their rental bills quickly, who help us move the bees, and co-operate in timing pesticide sprays. Those who don't do these things will not get bees from us."

We are not in a position to predict the future of honey prices. Perhaps they will never return to their old low level, but some moderation might be expected. As more of the general public become aware of different flavoured honey, the demand and price of these honeys will probably remain high.

But will honey production and pollination rentals continue to conflict? One possible solution might be the establishment of pollination experts who specialize in crop pollination and do not concern themselves with honey production. Such an idea is far from new — but the beekeeping industry has not been convinced that this is the way to go. Some beekeepers and apiculturists have talked about "feed-lot" beekeeping, where bees are fed and produced in a manner similar to beef cattle productions. Pollen supplements and sugar would be fed to the bees to produce bees efficiently. The bees would be divided into usable, movable packages and moved into crops requiring pollination. Research in many areas of apiculture has been concerned with this — with the chemical substances which regulate colonics, with colony nutrition, etc. Perhaps sometime in the future someone will tie all this information together and mass produce bees for pollination. Until then, co-operative programmes between growers and beekeepers will benefit everyone. New ideas and a great deal of work will be needed to accomplish the goals of good crop pollination using honeybees.

PROPOLIS — A MEDICINE OF THE FUTURE?

By Michael J. Turell

How can so many individuals live so close together and all co-operate for the common good? How can one bee "tell" another bee just where to find a new source of nectar? How can a queen bee lay nearly her own weight in eggs every day? These are but a few of the many mysteries posed by a colony of bees. Another, which many people don't usually think of, is why the colony is not a haven for bacteria and other micro-organisms. Think of all the food stored in a hive. Also, the bees keep the inside of the hive at about 92° F. These are just about perfect growing conditions for many types of bacteria, molds, and yeasts.

True, the bees do suffer from a few diseases, but consider what would happen if a jar of fresh grape juice or apple cider were left unpasteurized for any length of time. Would they remain as fresh and pure as does the bee's food? How do the bees keep their hive free from infection?

An article by Dr Forse in "Scientific American" (April, 1972) explains many of the factors which contribute to the sanitation in the beehive. Among these, he includes the high osmotic pressure of honey, the antibiotic effects of royal jelly, the glucose oxidase system of honey, the acidity of honey, the tendency of the bees to remove all foreign objects from the hive and to void their feces outside of the hive and the use of propolis, which has been shown to possess bactericidal and bacteriostatic properties. Bactericidal agents kill bacteria, while bacteriostatic agents prevent the growth of bacteria, but do not kill them.

That propolis could be used by man as well as by bees for the control of bacteria has been known for some time. Aristotle, the Greek philosopher and scientist who lived several hundred years before the birth of Christ, mentioned that propolis would heal festering sores. In more modern times, there have been several studies, most of them done in Russia, on the effect of propolis on a whole host of micro-organisms.

In particular, Feuereisl, a German scientist, reported in 1958 that propolis contained a water soluble substance which would prevent the growth of *Bacillus tuberculosis*, the bacteria which causes tuberculosis. In 1963, Karimova, a Russian scientist found that feeding pulmonary tuberculosis patients butter, which contained 10 to 15% propolis, helped to relieve the symptoms, and in two of the 45 cases, the treatment effected a complete cure. However, there is a phenomenon known as the Hawthorn effect, which stated briefly, means that almost any action taken in an attempt to reduce the symptoms of an ailment will help diminish the symptoms. This is the reason why many doctors prescribe a placebo, or harmless drug, meant to calm a patient's fears.

One of the few investigations of the properties of propolis done in the United States was conducted by Dr Lindenfelser in 1967. He tested the susceptibility of 80 micro-organisms to propolis extracts. While the propolis was found to have definite antibiotic effects on bacteria and fungi, it had no effect on yeasts. He found that gram-positive and acid-fast bacteria (two groups of bacteria) are among the most susceptible to the propolis extract. Interestingly, the most susceptible bacteria tested was *Bacillus larvae*, the causative agent of American Foul Brood. However, in his 1963 study of the disease, he found

that low dosages of the propolis extract did not control the disease, while higher concentrations had a definite negative effect on the bees. In his 1967 study, he also checked samples of propolis from many different parts of the country. By using paper chromatography, a method used by scientists for separating and identifying the constituents of a mixture, he showed that all of the samples contained the same ingredients, but in different proportions.

A French scientist, Dr Villanueva, found that propolis contains 3,5,7-trihydroxy Flavon, which is also known as galangine. He has also shown that galangine is an effective bacteriostatic agent, and feels that it is responsible for the antibiotic actions of propolis.

Other reports conclude that propolis extracts help burns to heal without infection, help cure foot-and-mouth disease in cattle, kill influenza virus, and are an aid in the treatment of various skin diseases. In the field of dentistry, Dr Muchnik, another Russian scientist, reported in 1964 that a two-to-four percent propolis extract is three to five times more effective as an anesthetic than cocaine. These and many other "cures" have been reported for the bactericidal and bacteriostatic effects of propolis.

It is true that "folk medicine" and "patent cures" have been advocated for many years. One should remember that many of these purported cures some of those which have been investigated, adequate controls were not maintained. Another of the problems with many of these reports is the Hawthorn effect mentioned earlier. What is needed are more scientific investigations into the medicinal properties of propolis. The use of propolis or a derivative from propolis may indeed benefit modern medicine. However, the use of propolis as a panacea, or its promotion by irresponsible people is bound to cause more harm than good in the long run.

1974 NORTH ISLAND SEMINAR FOR HONEY PRODUCERS

The Ministry of Agriculture and Fisheries is at the present time finalising arrangements for a three-day seminar/field day for commercial and semi-commercial beekeepers. The theme of the seminar is

HONEY: ITS PRODUCTION, PROCESSING AND PROMOTION

A range of Ministry, industry and outside speakers will be in attendance. Many opportunities for discussion and participation will be included in the programme.

AUGUST 13 - 15, 1974 AT TAUPŌ

is the proposed date and venue for the seminar. Full particulars will be included in the May issue of "The New Zealand Beekeeper".

BRANCH NOTES



Southland

A large gathering attended our Annual Field Day in brilliantly fine weather at Glass Bros property, Waikaka Valley on Saturday, February 2nd. Branch President, Tony Clissold, welcomed visitors and introduced Mr A. W. Begg, M.P. for Awarua, who officially opened the day.

A varied and interesting programme included the following: Ivan Dickinson, N.B.A. matters; Fred Bartrum, H.M.A.; Trevor Bryant, field trials on pollen supplements; Murray Reid, honey handling and presentation; Richard Beeby, artificial insemination of queen bees; David Penrose, uncapping oven; Kevin Ecroyd, metrication in hive equipment; Bob Hume, the virtues of pollen.

Visiting beekeeper Allan Graham from Canada, was extended a welcome and all present enjoyed his address and impressions.

Russel Cloake was awarded the W. T. Heron trophy for his sugar-feeding pump and tank combination. An auction of surplus equipment concluded the programme. A barbecue meal for visitors from afar was a feature later in the day.

Crops vary from very light in the dry areas to quite heavy in areas of higher rainfall.

—Allan Ward

West Coast

Rata flowered at waterlevel around the shores of Lake Mapourika and on the flat at Whataroa. But the flowering wouldn't be widespread or prolific enough to benefit the honey crop to any appreciable amount in the South Westland area and reports indicate that somewhat the same conditions exist in the north.

Weather conditions, although not bad for most industries, has fluctuated in temperature too much and been too windy for beekeeping.

Conditions have not been good, either for secretion of nectar or its collection with the result that a two super hive average could be the limit unless temperatures increase greatly and the rata vines flower well and early.

Hawkes Bay



All New Zealand beekeepers join us in congratulating Maurice Gordon on his "Gold" won at the Commonwealth Games last month. Local beekeepers' only regret is that his prowess does not directly compute with beekeeping in Hawkes Bay.

There is an abundance of clover flowering but no chance of a crop from it unless there is a prolonged spell of hot weather.

Not many beekeepers have extracted as yet but things are starting to speed up a bit.

The prospects of an increased payout is very pleasing and encouraging.

—Peter Lucas.

South Western Districts

South Western Districts are holding a Field Day on Saturday, March 9th in the Rangitikei district. A very interesting and instructive programme has been arranged and it is expected that the venture will be a success.

Notices and special invitations will be posted as soon as possible.

To anyone from anywhere, who wishes to attend, please take this as an invitation.

—Ernie Whalley.

EUROPEAN ECONOMIC COMMUNITY

As reported in the 1973 Year Book and Annual Report of the British Beekeepers' Association, the proposed new import duties for honey on entry into the U.K. are:

From Commonwealth

In 1972	.....	Nil
From 1/7/73	..	Nil
	1/7/74	.. 10.8%
	1/7/75	.. 16.2%
	1/7/76	.. 21.6%
	1/7/77	.. 27%

From Foreign Countries

In 1972	.....	25p. per cwt.
From 1/7/73	..	25p. per cwt.
	1/7/74	.. 10.2% + 15p. per cwt.
	1/7/75	.. 16.2% + 10p. per cwt.
	1/7/76	.. 21.6% + 5p. per cwt.
	1/7/77	.. 27%

From EEC Countries

In 1972	.....	25p. per cwt.
From 1/7/73	..	25p. per cwt.
	1/1/74	.. 15p. per cwt.
	1/7/75	.. 10p. per cwt.
	1/7/76	.. 5p. per cwt.
	1/7/77	.. Nil

At the present rate of exchange 5p. is equivalent to 8c N.Z. and the duty payable on honey sold at say 35c f.o.b. would be slightly over 4c per lb from 1st January, 1974.

The effect of this on the market price in England would be hard to assess. Perhaps, like lamb, in a similar situation, the price will be depressed.

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6 to 10	\$1.45 each
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MARKET REPORT: BEEKEEPERS' SUPPLIES

The December issue of "The Australasian Beekeeper" shows under the heading "Trades Notes" the phenomenal prices Australian beekeepers are having to pay for woodware. Full depth supers have risen to \$3.34 each, made from Radiata pine, but due to the shortage of this material, Almaciga and Meranti timber are also being used, but the price of these supers is \$4.15. Full depth frames are priced at \$21.70 per 100. Another Australian manufacture has put out a new price list for supers and frames. This manufacture obviously has a sense of humour, as with the price list he encloses a note which starts: "Please sit down to read this new price list". After giving the reasons for the increase he concludes with: "At least you will be able to tell your grandchildren that you remember when frames were 27/6 (\$2.75) per 100. That was the price of the first frames we made." The new price list shows his frames are now \$22.50 per 100 and full depth supers \$3.40 each.

WANTED TO BUY

HONEY EXTRACTOR

8-Frame Reversible Extractor with motor.

Also:

4-Frame Extractor, hand or motor.
Please advise location and price to:

E. A. POPE

P.O. Box 494, Napier

HONEY

Preferably Light Amber, Manukua, Rewarewa types. Top prices paid for honey of top quality. Drums supplied.

CITRUS APARIES

P.O. Box 24, Kaitaia

POLLEN AND ROYAL JELLY

WANTED

ANY QUANTITY

Top prices paid, gratefully
Abrosia — P.O. Box 54,
San Anselmo, California,
U.S.A., 94960

FOR SALE

30-Frame

RADIAL EXTRACTOR

Good American machine in good order. Offers.

A. M. WARD

10 Beattie Street, Gore

200

NEUC BOXES

4-Frame. Paraffin dipped. Galvanised iron lids. First class condition: \$2.35 each.

DAVIDSON'S APIARIES LTD

No. 4 R.D., Timaru

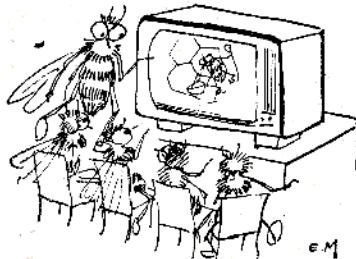
Up to 400

HIVE LIDS

In good condition; \$2.20 each.

DAVIDSON'S APIARIES LTD

No. 4 R.D., Timaru



The National Beekeepers' Association

(For the advancement of the Beekeeping
Industry in New Zealand)

'Better Beekeeping—Better Marketing'

NEW SUBSCRIPTION RATES (per year):
These do not take effect until year starting
1st April next. For present rates, see May,
1973 issue.

0 to 20 hives \$4.00	1001 to 1100 hives \$44.00
21 to 200 hives \$8.00	1101 to 1200 hives \$48.00
201 to 300 hives \$12.00	1201 to 1300 hives \$52.00
301 to 400 hives \$16.00	1301 to 1400 hives \$56.00
401 to 500 hives \$20.00	1401 to 1500 hives \$60.00
501 to 600 hives \$24.00	1501 to 1600 hives \$64.00
601 to 700 hives \$28.00	1601 to 1700 hives \$68.00
701 to 800 hives \$32.00	1701 to 1800 hives \$72.00
801 to 900 hives \$36.00	1801 to 1900 hives \$76.00
901 to 1000 hives \$40.00	1901 to 2000 hives \$80.00

And increasing by \$4 for each 100 hives up to a
maximum of 4000 on which the subscription will
be \$160.00.

APIARY INSURANCE (Public Risk Indemnity)

Free Cover for Association Members

All financial members of the Association are
automatically indemnified against Public Risk
claims up to \$10,000 in any occurrence of injury
or death to persons or livestock directly attribut-
able to the action of the members' bees and
arising from his or her negligence as the bee-
keeper. The cover is underwritten by the New
Zealand Insurance Company Ltd and the pre-
mium met by the Association from consolidated
funds.

THE N.Z. BEEKEEPER

The subscription rate for all members is \$1
per year, all others \$2 (NZ) per year. Please
check the exchange rate in your country and
send an amount to produce \$2 (N.Z.) here. For
example it now takes \$2.90 (US) to make \$2
(NZ).

Literary contributions and advertisements must
be in the hands of the Editor, Mr N. S. Stan-
ton, P.O. Box 4106, Auckland, not later than the
25th of the month preceding publication.

Nom-de-plume letters must be signed by the
writer and address given, not necessarily for
publication, but as proof of good faith. Letters
accepted for publication do not necessarily
express the views of the Editor or the Executive.

ADVERTISEMENT RATES

Quarter Page	\$5.00	Per Inch	\$1.50
Half Page	\$9.00	Min. Charge	75c.
Full Page	\$16.50	for each insertion	

FRONT PAGE STORY

Hive Moving In Honeydew Country

Boom loaders are now ac-
cepted as an essential part of
the commercial beekeeper's
equipment. Whether (as here)
being used to shift complete
hives or just supers for ex-
traction or even drums on
their way for export, these
loaders must save time,
money and effort.

This one is on location in
the Canterbury foothills
where Jasper Bray's family
are lending a helping hand to
shift colonies which have been
collecting honeydew.

Once upon a time no com-
mercial beekeeper would ad-
mit that his bees would touch
the wretched stuff. But times
change. Honeydew has come
of age so to speak, whether
it is being exported in bulk
or merely used as convenient
winter bee feed. And the price
now compares favourably
with the honey gathered from
floral sources. So much so
that several beekeepers are
able to make a living in
Canterbury from honeydew
alone.



Bee Supplies

IMPORTED ITEMS

In some cases overseas manufacturers are still months behind with deliveries and in other cases we have used our full import quota for the current importing year. Items which are at present low in stock due to one or other of the above reasons are:—

Queen Excluders

*Bench Model Extractors

Pender Hive Tools

*5lb Spools Frame Wire

Hive Strappers

*3 1/2" Brass Smokers

* Indicates no stock at present, but further supplies expected.

LOCALLY MANUFACTURED ITEMS

In general there is no backlog of orders for locally made items and our Woodware Department is working at full production. However, some timber sizes are in short supply and early ordering will assist us in planning production. We have no suitable timber at present for Australian type frame top bars and we are therefore supplying New Zealand frames where this alternative is acceptable to the beekeeper.

As our timber stocks are dwindling and we are having difficulty obtaining further supplies, we would stress the need for early ordering of woodware, as orders will be filled on a first come, first served basis.

Manufactured & imported by The Alliance Bee-Supplies Co. Ltd

Distributed throughout New Zealand by:

A. ECROYD & SON LTD.

25 Sawyers Arms Road, Papanui, Christchurch, 5.

Telegrams: "Beeware", Christchurch. P.O. Box 5056, Papanui

Phone 526-044