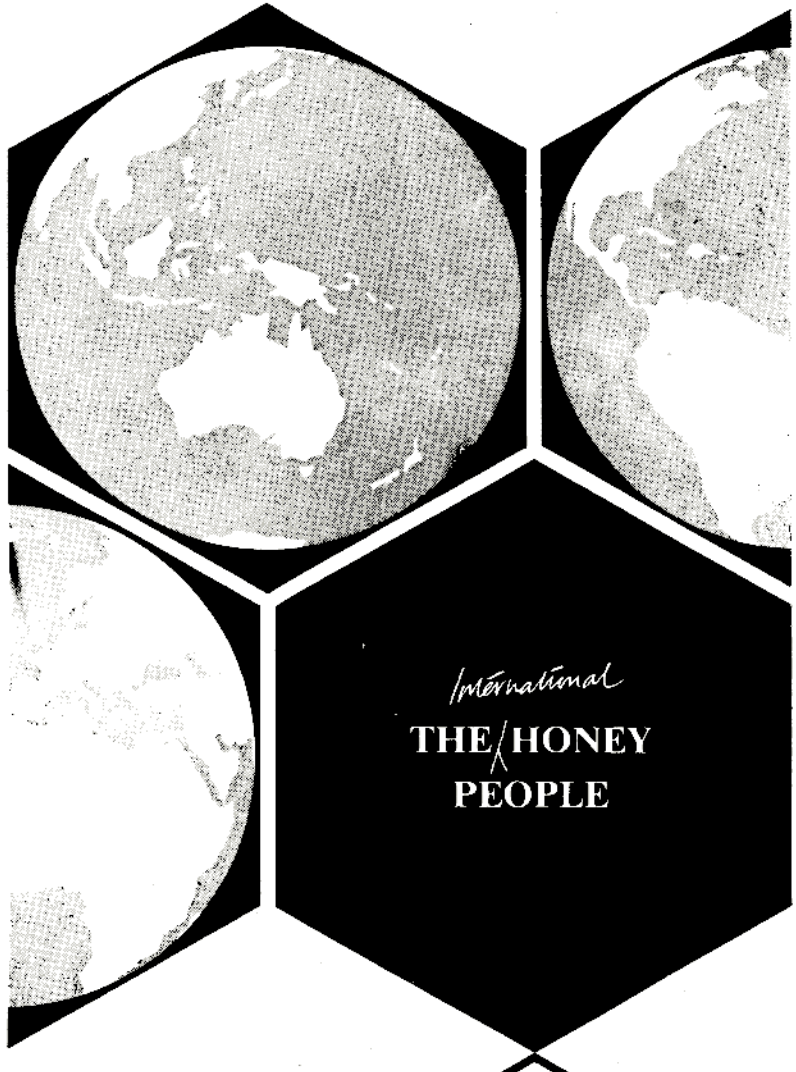
THE NEW ZEALAND BEEKEEPER

November 1974

Papua New Guinea Project



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THE NEW ZEALAND BEEKEEPER

Vol. 36, No. 4

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Editor: Norman S. Stanton

NOVEMBER, 1974

CONTENTS

Honey Marketing

At the recent Taupo Seminar Dudley Ward raised some interesting points in his paper on "Marketing of Honey Within N.Z."

It is interesting to note, in connection with his comments and predictions that, for the first time in several years, H.M.A. packed honey is on "special" at one of the largest groups in the Auckland area. And this was one of the most popular South Island creamed clover lb packs at 47c. Not that I object to price discounting or cutting as such. It becomes a problem only when the strong use it as a weapon against a weaker or more vulnerable person.

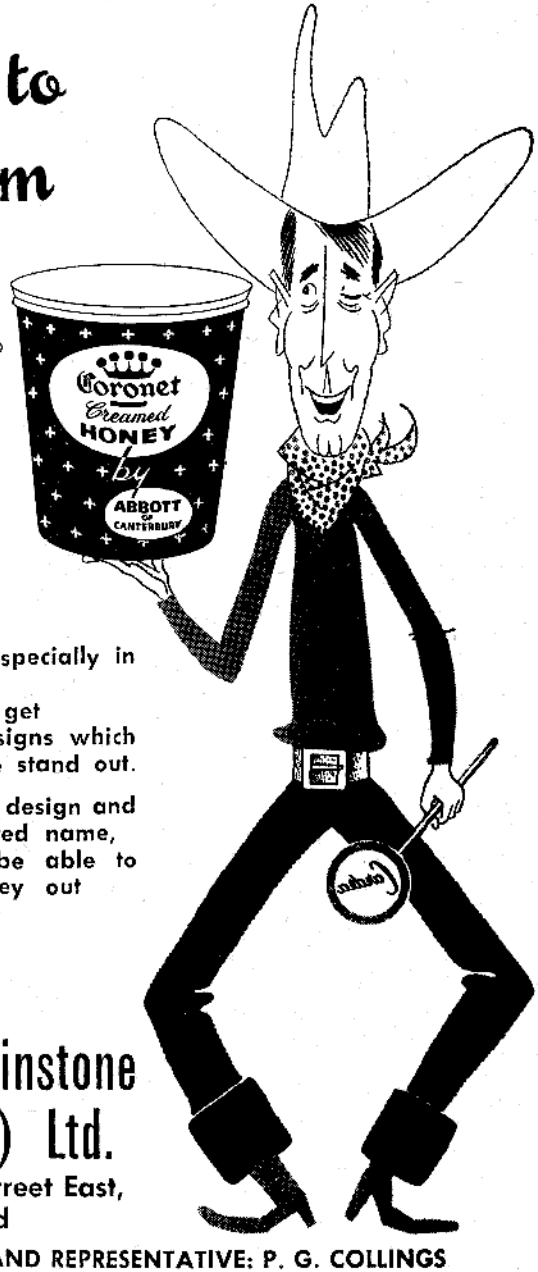
Could "the stronger" in this case be the Supermarket Chain and the H.M.A. and "the weaker" the producer?

With overseas prices falling and the buyer's still adopting a "wait and see" attitude the recent devaluation was marginally helpful. Must we now admit that the economic condition of our main customers is the main factor dictating the sale of our honey at satisfactory prices?

The next few months will be vital.

It pays to brand 'em

Don't sell your honey blind! If you want people to buy **your honey** — not just any honey — you must mark it with your brand or name.



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NATIONAL BEEKEEPERS ASSOCIATION OF NEW ZEALAND (INC.)

Minutes of Executive Meeting held in Wellington, September 17 and 18, 1974. Remits as passed by Conference were received at this meeting. Some relevant debate from Conference has been included.

PRESENT

Messrs I.J. Dickinson (in chair), D. Penrose, G.J. McKenzie, M.D. Haines and M.G. Stuckey.

ALSO PRESENT

G.A. Beard, General Secretary

APOLOGIES

Messrs P. Berry (overseas), N. Stanton.

WELCOME TO MEMBERS

Before taking the business of the meeting the Chairman welcomed members of the meeting and expressed the hope that the Executive would establish and enjoy a happy working relationship with a new secretary. The Chairman also referred to the absence of Mr Berry who was presently overseas.

HIVE LEVY PROPOSAL

(a) Letter ex Mr G.B. Barclay, Under-Secretary to the Minister of Agriculture advising that the Association's request that the Primary Products Marketing Act 1953 be amended to make provision for the collection of a Hive Levy under that Act, would be considered for inclusion in this years Statutes Amendment Bill.

(b) Draft of Amendment No. 4 to the Honey Marketing Regulations 1974. The Chairman reported fully on the discussions that had taken place with Mr Berry and Mr Don Hayman of the Ministry of Agriculture in formulating a preliminary draft of the regulations. Later there had been further discussions at Taupo and the present draft was in effect a discussion paper. The Executive then proceeded to consider the preliminary draft in detail. The following points and alterations were noted or agreed.

(1) "Hive" means an artificial hive containing a colony of bees capable of the production of honey including the by-products of honey.

(2) The apportionment of the Levy Revenue. The Committee noted the likely priorities of claim.

(a) The administrative cost of collecting the levy.

(b) The National Beekeepers' Association.

(d) The Honey Marketing Authority.

(3) Levy and Subscription to N.B.A. It was agreed that the Hive Levy should automatically cover the membership subscription and the subscription to the "Beekeeper".

As the Hive Levy would not apply to Beekeepers with fewer than 50 hives it was considered that a flat rate N.B.A. subscription should be set plus an optional subscription to the "Beekeeper".

It was also accepted that flat subscription rate for the U/50 hive members would need to be set at a level relative to the over 50 hive group.

(4) Proposed Levy Rate — 15 cents per hive. This is expected to yield approximately $28,000 annually.

(5) Re Clause 29B. New clause to be added to cater for unauthorised expenditure.
(6) Re Clause 29, 3(D). It was agreed to discuss with the Ministry the position of comb honey producers in respect of pool accounts.
(7) Re Clause 30 (1). It was agreed that the word "occupation" be changed to "ownership".
(8) Discussion with Messrs E.W. Lee and D. Hayman on the Draft Regulations.
The Chairman welcomed Messrs Lee and Hayman to the meeting and advised them that the Executive had given consideration to the Draft and had a number of points for discussion.
It was agreed to take these as they arose.

(1) Definition of the term "Hive" —
Agreed to read —
.....colony of bees capable of being used in the production of honey.

(2) Leasing of Hives and Ownership. This point was examined and it was agreed that the word "ownership" be used throughout the Regulations.

(3) Re Clause 20(4) — Substitute "during" for the word "for".

(4) Re Seals Levy. It was noted that the Seals Levy would remain in force until the Hive Levy commenced.

(5) Hives Levy Year.
(1) That the Hives Levy Year be the Calender Year.
(2) That the Declaration date be January 1st in each year, Payment date 20th February with final payment date 31st March.

(6) Re Clause 29. That the order of the sub-clauses be amended.
(i) "A" to remain "A"
(ii) "C" to become "B"
(iii("B" to become "C"
(iv) "D" to remain "D"

(7) Apportionment of Levy Revenue. In keeping with the order of priorities established under Clause 29 (as amended) it was agreed that for the Levy Year 1975 (i.e. the first year) the sums apportioned be settled by mutual agreement between the Association and the Honey Marketing Authority.

(8) November Beekeeper.
"That an advance notice be published in the November 1974 issue advising Beekeepers that the first declaration of Hive numbers will be required as at January 1st 1975."

(9) Forward Action on Draft.
(1) "That Mr D. Hayman be requested to confer with the General Secretary on the revision of the Draft to incorporate the several agreed amendments and consequential adjustments to operative dates."

(2) That the Association write to the Honey Marketing Authority advising that the Draft Regulations relating to the Hive Levy Proposal to be sent forward to the Authority by the Ministry has the concurrence of the Executive Committee of the Association."

CORRESPONDENCE:

New Zealand Sugar Company 6-8-74: The Chairman supported by Mr Penrose reported a difficult supply position in some areas of the South Island. The Chairman duly phoned the Company who advised that arrangements were being made to ease the South Island supply situation. The Executive was of the view that Branches should advise their Executive member or the General Secretary of any sugar supply difficulties.

Alliance Bee Supplies re import licenses for smokers. The correspondence was introduced by Mr E.W. Lee during his attendance at the meeting.

In discussing the question members of the Executive expressed the view that there must be supplies of smokers held in stock. The demand was seasonal and unpredictable. (The bellows

are made locally.) "That the Executive Committee support the application and that Mr Barclay be advised accordingly."

Outward Letter to Mr G.B. Barclay, Parliamentary Under Secretary to Minister of Agriculture, 24-7-74 requesting increase in Marketing Authority grant from $4000 to $6000. — Reply awaited. The Executive noted that while a reply had not been received the development of the Hive Levy proposal could have an influence on the position.

Waikato Branch N.B.A. 5-8-74 Re Conversion of Brood Chamber measurements to metrics.

"That the Waikato Branch be advised that the consideration took into account all the related factors involved and it was agreed that 238 mm was the most satisfactory depth measurement standard for brood chambers."

Re Hive Levy Proposal.

"That the Waikato Branch be advised that when agreement has been reached with other key parties branches will be advised of the proposals."

President's Honorarium.

"That the Waikato Branch be advised that the Executive Committee is satisfied with the existing policy and procedure and does not propose to suggest amendment.

Life Membership. The Executive Committee considered the matter in some depth and resolved that the following guidelines should apply to nominations for Life Membership of the Association.

(1) That nominations for Life Membership of the National Beekeepers' Association must originate from branches.

(2) That the person nominated should:
   (a) Be a member of the Association who has rendered outstanding service to the Beekeeping industry at large.

Or (b) Be a person who has in a non-member capacity (e.g. administrative/research etc.) rendered outstanding service to the industry as a whole.

(3) That all nominations should be in the hands of Executive Committee by March 31st of each year.

Mr Donald T. Appleton. British Isles Bee Breeders Association advising that he proposes to visit New Zealand on holiday for a period from November 1974 and that initially he will be based at Morrinsville. Resolved "That the services of the Association be extended to Mr Appleton and that the Waikato Branch be asked to nominate a contact for Mr Appleton on his arrival."

N.Z. Food and Processing Chemical Union: (Canterbury Branch). General Secretary's report on progress of Agricultural Workers Legislation. Resolved:

(1) "That the Association advise Federated Farmers that the National Beekeepers' Association wishes to link with other Employer groups in the development of a revised Agricultural Workers Act."

(2) "That the General Secretary reply to the Food Processing and Chemical Union that the Association along with other Agricultural Employer groups is presently engaged in discussions and negotiations relative to the proposed Agricultural Workers Act under which Apiary Workers would be covered and suggest that any action to include Apiary and allied workers in other Unions such as theirs be deferred until the amended Agricultural Workers Act is passed early in 1975."

Bay of Plenty Branch re Impact Report on Forestry Development in that Region. Resolved: "That the advice be received and the Branch advised that the Executive Committee would like to be kept advised of further developments in the matter."

Department of Education (Christchurch) — Vocational Guidance.

The Vocational Guidance Officer wrote requesting that a basic information schedule be completed. The Chairman reported that he had completed the form which could now be dispatched.

Food and Agricultural Organisation (via D.S.I.R. Auckland) re Working Party Study on Pesticide Resistance. Resolved:

(1) "That the questionnaire be referred to Mr E. Smaellie, Superintendent Beekeeping Ministry of Agriculture for his attention."

(2) "That Mr Smaellie be requested to confer with Mr D. Palmer-Jones, Wallaceville Research Station in the matter.

Atlantic and Pacific Travel — Advising that 25th International Federation of Beekeepers Associations, Apimonda, would be held in France in August 1975.

(Minute Note: It is proposed that a schedule detailing income and expenditure will be presented to each meeting of the Executive Committee and also a cash figure will be presented to the President each month.)

(d) Re (i) Library Fund
(ii) Bursar Account

Resolved: "That the General Secretary report on the location and sums held in these accounts."

GRANT EX HONEY MARKETING AUTHORITY

That The General Secretary write to the Authority requesting the transfer of the $4000 grant to the Association.

HIVE LEVY PROPOSALS —

Associated Expenses for Mr P. Berry. The Chairman in raising the question said Mr Berry had given a lot of time and had incurred considerable expense in the development of the first draft of the regulations and had also made his solicitor available both in Hastings and Taupo.

The Executive Committee resolved:

(1) "That it record its appreciation and gratitude to Mr Berry for the assistance he had given in the development of the first draft of the Hive Levy Regulations."

(2) "That any expense incurred in the future by Mr Berry in respect of the Hive Levy Regulations and other Association business be met by the Association."

REMIT NO. 2 — Re Formation of Sub-Committees within framework of Association.

Remit amended to read: "That this conference considers the time opportune for the formation of sub-committees representing sectional interests as may be deemed necessary within the framework of the Association."

In seconding the Remit Lorimer expressed the opinion that this should not result in automatic election to the Executive as of right. But he favoured the concept of sub-committees.

Berry: The concept sounds good but in operation would be hopelessly outrageous. Doubling the size of Executive would be unweildy, unworkable and as far as I am concerned is just not on.

Stuckey: The idea is sound in my view. Executive should be made up of representatives of the various groups but the time will not be opportune until our finances are in order.

R. Cloake: Southland did not consider Remits 2 and 3 to be a package deal. In our view they are separate issues.

Some relevant points from the Conference Debate are included with the Remits here considered by Executive for action.
The Editor does not pretend that this coverage is complete.

Blair: With the present divisive situation within the Association this could be a step towards better co-operation. Executive could then invite special-interest groups to its meetings for special discussions.

Poole: On what basis would the Packers who have no hives be eligible for representation? on Executive.

At its September Meeting Executive resolved: "That the Remit be referred to the 1975 Conference as directed."

REMIT NO. 3 Re Extension of size of Executive to include representatives from Sectional Groups within the industry who would have the right to nominate additional members of Executive. Motion was withdrawn.

REMIT NO. 4 (1) Re amendment of Rule 28 (ee). The amended wording reads "On a poll each delegate shall have one vote for each full dollar of annual subscription of financial members present in person or by proxy at the Branch meeting empowering the delegate and that both majority and minority votes be recorded in the delegates vites at Conference."

At its September Meeting Executive Resolved: "That the Rule as amended be sent to the Association's solicitors for comment."

REMIT NO. 5: Re recording of votes both for and against for permanent record of members feelings. Motion was withdrawn.

REMIT NO. 6: By 1170 Delegates' votes for and 638 against, it was resolved: "That delegates only vote on remits that have been discussed at Branch level and that any subsequent notices of motion put before the Conference a vote will be taken from all financial members present."

REMIT NO. 7: Re voting results to be displayed on board at Conference.

At its September Meeting Executive Resolved: "That the 1974 Conference decision be referred to the General Secretary to note as a future Conference procedural requirement."

Stuckey: Auckland branch would like to know what other branches were thinking in order that we might understand more about ourselves.

R. Cloake: Spoke against motion, resenting implication implied in it.

Davies: Conference is overlooking the important matter of the complexities of implementing this Motion.

Whalley: We are not concerned with secrecy. This procedure could establish pattern of future thinking.

REMIT NO. 8: Re Federated Farmers. Association affiliation, on what basis?

At its September Meeting Executive resolved: "That the matter be referred to the December meeting and that meantime Mr Stuckey be requested to supply background information."

REMIT No. 9: Re Drawing Ministerial attention to necessity of recognising only N.B.A. as representing the whole beekeeping industry.

Lorimer: There are some who have two voices and I sometimes wonder where their loyalties lie. Consistently opposed to groups formed outside organisation.

Whalley: This Remit is unnecessary as Barclay has already said he will listen to all who wish to present their views but may not necessarily act in the way they want him to.

Blair: Would there have been a Comb Honey industry today if they had had to be saddled with the greater costs of a job being done by N.B.A.

Hansen: Spoke against Remit. Specialist problems better dealt with by small intimate groups.

Berry: The idea sounds good because the H.M.A. doesn't seem to figure in this. Will anybody suggest that the Comb Honey Producers have acted against the Beekeeping industry as a whole? The N.B.A. should have been happy they did not get loaded with this one.

Motion Lost 12-3.

REMIT NO. 14: Research into development of sweet clover.

REMIT NO. 10: Re Circulars, Minutes to other than regular mailing list persons or branches.

At its September Meeting Executive Resolved: "That a charge of $20 per year be made where a person or organisation requests to be added to the normal mailing list for Association circulars, Executive Minutes etc."

REMIT NO. 11: Amendment to Resolution passed at Nelson rescinding previous motions, also promulgation of new regulations on Seals Levy. Motion withdrawn.

REMIT NO. 12: Re relationship Honey Grading System to Payment for darker honeys.

At its September Meeting Executive Resolved: "That the Remit be referred to the Honey Marketing Authority for comment."

REMIT NO. 13: Re rail freight on honey to depots.

At its September Meeting Executive Resolved: "That the Remit be referred to the Honey Marketing Authority for comment."

REMIT NO. 14: Research into development of sweet clover.

At its September Meeting Executive Resolved: "That the Association state a case for a research grant-in-aid to the Hon. Minister of Agriculture."

(Editor's Note: An article is in course of preparation which will cover the present state of the development of the use of sweet clover.)

REMITS NO.'s. 17, 18, 19, 20: All centre round Levy Scheme as passed in Nelson and subsequent developments. Following passage of Remit 21 these Remits were withdrawn.

REMIT NO. 21: Re Hive Levy Scheme. Hawkes Bay Remit amended to read: "That Conference is of the opinion that a Hive Levy should be implemented to finance (1) The N.B.A. (2) H.M.A. Administration costs (3) Provide Equalisation Fund when necessary."

The debate on this important issue is summarised as follows:

Whalley: Speaking to Remit 17, this is the lesser of two evils, the scheme (Hive Levy) now before us is the greater evil.

Another Voice: Against Remits 17 and 18. Opposed because method clumsy and expensive to enforce. Too much paper work wastes time which could be more profitably used in producing honey.

R. Cloake: Executive should have carried out scheme passed by great majority at Nelson.

McKenzie: Voted against 17 and 18 on basis of information that new Scheme (Hive Levy) would be improvement.

Jansen: Waikato voted against this (Remit 21) because they had no evidence that a Hive Levy would be an improvement.

Stuckey: Some support for this new proposal. At present we are virtually operating a Hive Levy.

Poole: (Replying to compulsory clause) Anything can be made compulsory if the Government agrees. Hobbyist (under 50 hives) would be excluded from any Levy Scheme. Unfortunately Levy Scheme as passed at Nelson was found to be unworkable.

Berry: Hawkes Bay voted against Remits 17 and 18 because they were put forward as a workable procedure but we do not agree. The original Levy was ambiguous. The Regulations have been brought into line with practise by amendments.

Herron: We appear to be coming to a stage where we do not know what we are talking about with Remits 17 and 18. Many of us are wondering what is going on. The end result will be the same if we are in favour yet scheme is found to be unworkable. Conference appears to be rapidly clouding the issue.

Penrose: Executive should make the porition clear. The National Executive is elected to carry out the wishes and intent of Conference. If a Scheme is passed which is subsequently found to be unworkable Executive would be expected to adjust it within the limits of the concept as passed. The Scheme as put forward by the H.M.A. and N.B.A. was an attempt to interpret your wishes at Nelson Conference. It was Berry who gave us the directive. However, the Scheme was found to be unworkable unless amended. All the H.M.A. and N.B.A. have done is to rearrange the details of contents within the intention of Conference. Then to the best of our ability we have presented a scheme which we think is workable.

Bray: It is like a person who buys an old bomb and puts new parts into it every time he is faced with trouble.

Jansen: Executive have done the right thing in this.

Berry: Nobody is taking Executive to task for what they have done or what they have not

done.

Ecroyd: Speaking as a Member of the H.M.A.; my 30 hives do not greatly affect me financially. On consultation we found that the Scheme as passed in Nelson was unenforceable. In consultation with N.B.A. we have modified this Scheme as little as possible just to make it enforceable. In my opinion a Levy Scheme based on the Nelson Conference Remit is more equitable. A Hive Levy could bankrupt a man who has a series of droughts and poor crops.

Berry: At this stage I think the existing wording covers the fundamentals of the issue of Seals Levy v. Hive Levy. This is the first major issue in which Branches have been able to bring full delegates' votes to conference, both for and against. The Association unquestionably needs more finance and this needs to be collected equitably.

Jansen: Waikato Branch supported Remit 21 (Hive Levy) in principle because of dissatisfaction on Levy Scheme. A Levy Scheme is costly to administer and would involve the beekeepers in a lot of book work. It could make beekeepers lawbreakers by default if they did not follow carefully all six pages of declaration.

Bartrum: Against Hive Levy because it would be a cost to beekeeper which could not be passed on in increased costs. Also it would have to be paid regardless of income. Ask the question, will it force unregistered hives round the country which have disease to be omitted from reports?

Smaellie: The Department does not favour supporting Hive Levy.

R. Cloake: In drawing attention to principles involved seemed to see diversionary tactics to cloud real issue. Hawkes Bay has always backed a losing scheme and is not consistent. Amazed to note support for a Hive Levy Scheme which was not there before. If this is passed we will be no further ahead than we were last year. Finally, must stress that we have to have a Levy which is in operation this year.

Cattermole: In reply to comment that Hive Levy would send disease underground and hives would be neglected. Hive Levy would have to confirm that hives have been inspected. All commercial men are on lookout for disease because they know it is in their own interest to see that it is eliminated.

Jansen: Whatever happens we must not put our Apiary Instructors in the role of policemen.

Ashcroft: Neither Scheme allows for an Equalisation Fund contribution. The danger is not in hiding hives but in hiding apiaries. As I see it the purpose of the Hive Levy is to change from Equalisation Fund to Administration Fund. In my opinion a Hive Levy would be a stimulus to production.

Barber: The Hive Levy idea has always been attractive but it was rejected 20 years ago.

Berry: Can I ask the Government representative, is it their policy to allow local prices to come to export parity? Answer: No, we favour subsidies.

R. Cloake: As I see it, the method of costing is on the total amount required for N.B.A., H.M.A. and Equalisation Fund divided by total number of hives or amount of honey produced. In each case the resulting total amount should be the same.

(2) Re amendment of Rule 18b. The amended wording reads: "That six members comprising the General Executive shall be elected at the Annual Meeting, such election to be conducted under a preferential voting system."

At its September Meeting Executive Resolved: "That the Rule as amended be referred to the Association's solicitors for comment.

REMIT NO. 23 Re Apiary Instructor Service — Hawkes Bay/Poverty Bay.

At its September Meeting Executive Resolved: "That the remit be referred to the Superintendent Beekeeping for comment and that the matter be further examined at the December meeting."

REMIT NO. 25 Re indiscriminate use of sprays.

At its September Meeting Executive Resolved: "That the matter be referred to the Superintendent Beekeeping for appropriate attention."

REMIT NO. 26 Re Sugar Refinery in South Island.

At its September Meeting Executive Resolved: "That the remit be referred to Federated Farmers in support of any action the Federation may be comtemplating along these lines."

REMIT NO. 27 — Re Superannuation Scheme.

At its September Meeting Executive Resolved: "That in view of the fact that the legislation has now been enacted no further action be taken."

REMIT NO. 28 — Accident Compensation for self-employed Apiarists.

At its September Meeting Executive Resolved: "That it be recommended to Branches that should they wish to obtain information on accident compensation claims they should contact their local office of the State Insurance Office."

REMIT NO. 29 — Re Honey Price Movements.

At its September Meeting Executive Resolved: "That the remit be referred to the Honey Marketing Authority with a request that the Authority release to the Editor of "Beekeeper" a market and prices report."

REMIT NO. 31 — Re Wasps.

At its September Meeting Executive Resolved: "That a letter be forwarded to the Under Secretary to the Hon. Minister of Agriculture seeking the aid of Pest Destruction Councils in the furtherance of the aims of the proposals advanced in the remit."

REMIT NO. 35 — Re Farm Workers Union. — refer earlier minute on general subject.

At its September Meeting Executive Resolved: "That the Honey Marketing Authority be invited to comment and also outline their trading policy in respect of this class of honey."

REPRESENTATION, DOMINION COUNCIL FEDERATED FARMERS

Resolved: "That the Association's representative on the Dominion Council be the President with the General Secretary acting as his deputy where appropriate."

VALEDICTORY

Resolved: "That letters of thanks and appreciation be forwarded to:

(a) Mr and Mrs E.R. Neal

(b) Messrs J. De Wit, M.D. Cloake and J.D. Lorimer."

BEE CLUBS

The subject was introduced by Mr Haines who sought guidance as to how such clubs could be kept informed of Association affairs. Resolved: (1) "That a Bee Club be treated on the same basis as individuals for the special mailing list" (2) "That Mr Haines be requested to report back to the club concerned."

INDUSTRY WAGE SURVEY

Resolved: "That no action be taken pending the clarification of the action to be taken in respect of the Agricultural Workers Act."

NORTH ISLAND SEMINAR — TAUPO

Resolved: "That a letter of appreciation be sent to the Director of the Advisory Services Division expressing appreciation of the excellent organisational arrangements made for the seminar."

AGRICULTURAL CHEMICALS BOARD — ASSOCIATION'S REPRESENTATIVE

Resolved: "That the General Secretary advise the Hon. Minister of Agriculture of the resignation of Mr Tom Pearson and of the nomination of Mr Jack Fraser as the Association's representative on the Agricultural Chemicals Board."

FARM CADET SCHEME

The President reported that he knew of two young men who were available, one in Nelson and the other in Waikato. The problem was to find Apiarists willing to accept cadets. Resolved: "That the matter be placed on the Agenda of the next meeting and the Farm Cadet Officer, Federated Farmers be invited to attend."

HONEY GRADING REGULATIONS 1950/143

HONEY EXPORT REGULATIONS 1950/142

Resolved: "That an enquiry be addressed to the Director, Horticulture Division asking if a review is programmed and if so, are the proposed amendments available for discussion."

IMPORTATION SWEET CLOVER SEED EX CANADA

Resolved: "That details of the importation requirements be requested from the Ministry of Agriculture."

CARTON SUPPLIES — ALEX HARVEY & COY

It was reported to the meeting that the Company was imposing a surcharge of 10 per cent on single carton deliveries. Resolved: "That the Company be requested to advise the reason for its policy in the matter."

METRIC MEASUREMENTS FOR THE LANGSTROTH HIVE

The hive body and frame measurements presented in this report are the recommended metric equivalents resolved at two recent meetings between the Ministry of Agriculture and Fisheries and Beekeeping Industry representatives. Hive equipment made to the adopted metric measurements will be satisfactorily interchangeable with existing equipment manufactured to standard Imperial sizes. Based on these adopted metric measurements, the Ministry of Agriculture and Fisheries will shortly prepare a publication showing full construction details of its preferred range of Langstroth-type hive components.

By GRAHAME M. WALTON

Introduction

In 1969 the New Zealand Government established the Metric Advisory Board to co-ordinate and organise the progressive adoption of the metric system (International System of Units) in place of the imperial (or British) system of units. At the present time many industries and Departments have changed, or are in the process of changing, to the metric system. Although some difficulties and confusion are unavoidable during the changeover period there is no doubt that New Zealand will end up with a better and easier system. The overall metrication plan is to be substantially converted to the metric system by 1976.

The area where metrication particularly affects the beekeeper is the size of timber. The Divisional Committee on Building Materials, Metric Advisory Board, has prepared a directory of proposed metric dimensions for building materials. The New Zealand Timber Merchants Federation and New Zealand Sawmillers Federation have accepted these recommendations. As a result, it is intended to phase out the production of imperial sizes of timber by December 1974 and to introduce metric dimensions thereafter. In fact, some sawmillers have already adjusted their machinery to metric sizes.

The standard metric widths adopted by the timber industry are 50, 75, 100, 125, 150, 200, 225, 250 and 300mm, with thickness sizes of 25, 30, 40, 50, 75 and 100mm. As from January 1975 the familiar 4in by 2in green-sawn timber will become 100mm by 50mm and, for the beekeeper, the 10in by 1in board will become a 250mm by 25mm standard size.

The Langstroth hive

The beekeeping industry has an estimated $5,000,000 tied up in hive equipment. Fortunately New Zealand has accepted just one hive type — the Langstroth. There is no justification for the sake of metrication in making a major departure from existing equipment preferences. The Langstroth hive has proved to be a most suitable domicile for bees. Crops in excess of 250kg (551lbs) have

been obtained from it. Unsatisfactory seasonal and floral source conditions together with inappropriate colony management methods are the major factors limiting crop yields — not the design of the hive.

The 10-frame Langstroth hive is the most widely adopted commercial hive-type in the world today. Considering the fact that over 130 countries are on the metric system, or intend to change to it, it could be expected that an international standard for the Langstroth hive would be in existence. Apparently this is not the case. A metric specification for the Langstroth hive is available in many countries in Europe, Central and South America, but considerable variation is evident from country to country. Even in the United States, the birthplace of the Langstroth hive, imperial specifications differ from State to State, and from manufacturer to manufacturer.

The standard New Zealand hive design is somewhat different from the Langstroth-types in other countries. We are therefore obliged to base metrication almost exclusively on our existing New Zealand hive specifications.

Basis for conversion

In proposing a metric specification for Langstroth equipment the following factors were regarded as important:

- — Optimum bee-space and bee behaviour requirements.
- — Continued use of existing imperial equipment.
- — Availability of metric timber.

(1) *Critical bee-space measurements:* Of major importance in all hive construction is "bee-space". This measurement is 8±2 mm. Without the proper bee-space certain spacings within the hive would eventually become blocked-up with wax and propolis. Although some waxing and propolising is unavoidable in any hive, it is paramount that this should be reduced to a minimum.

In its bulletin No. 267 titled "Beekeeping in New Zealand" the Ministry of Agriculture and Fisheries recommended a number of Imperial measurements that differed quite significantly from Langstroth measurements broadly accepted by other countries. For instance the space between a frame end-bar and the inner wall of a Langstroth hive body was only 7/32in ± 3/32in (5.6 ± 2.4mm). The space between two adjacent top-bars was 7/16in (11.1mm) for the Imperial specifications; well above a bee space.

The Langstroth-type hive has been in existence for 100 years. Recent international research has shown that the original specifications could be improved by introducing measurements that are conducive to optimum colony performance. For instance, the ideal spacing of brood frames mid-rib to mid-rib is 32-34mm; cf. 1.3/8in (34.9mm).

In selecting the appropriate metric measurements there has been sufficient flexibility in hive dimensions to maintain or improve the bee space whilst providing for a full interchange of equipment. Metrication has proved to be a suitable opportunity to rectify some of the shortcomings in the existing specifications.

(2) *Continued use of existing Imperial equipment.* It was considered desirable that the frames built to Imperial dimensions should be relatively interchangeable with metric frames; Imperial hive bodies with metric hive bodies.

Despite the existence of an Imperial specification for hive equipment there is, in the field, a considerable variation in the sizes and the methods of construction for hive equipment. The proposed metric specification contained in this report departs little from the existing Imperial specification and lies well within the natural range of equipment dimensions found in the field. No guarantee can be given that full interchange will be possible if existing equipment differs significantly in size from the accepted Imperial specification.

(3) *Standard timber sizes.* The timber industry has adopted a standard range of metric timber sizes. Whilst the timber industry would be prepared to mill timber to suit any requested size (subject to the quantity of timber ordered) and departure from the standard timber range will involve an increased cost to the beekeeper.

In adopting the sizes specified in this report it was considered important to select hive body measurements that could

ADOPTED SIZES FOR THE METRIC LANGSTROTH HIVE

HIVE BODY TIMBER THICKNESS

20 mm (derived from 25 mm green-sawn)

HIVE BODY OUTER MEASUREMENTS

505 mm x 405 mm

HIVE BODY INNER MEASUREMENTS

465 mm x 365 mm

HIVE BODY DEPTH

(i) brood chamber (full-depth Langstroth)
238 mm (derived from 250 mm green-sawn)

(ii) honey super (three-quarter depth Langstroth)
185 mm (derived from 200 mm green-sawn)

(iii) section super (half-depth Langstroth)
133 mm (derived from 150 mm green-sawn)

REBATE

(i) rebate depth
13 mm

(ii) rebate ledge
10 mm

FRAME SIZES (in millimetres)

	Hoffman type	Manley type	Section holder
top-bar			
length	482	482	482
width	25	25	38
thickness	16	16	8
lug thickness (at point of contact)	10	10	8
bottom bar			
length	450	450	450*
width	25	25	38
thickness	10	10	8
end-bar			
length	230	177	125
width	33	43	46
thickness	10	10	8

*this length subject to further evaluation

STANDARD SECTION

overall length	:	428.6 mm
width	:	46 mm
thickness	:	3 mm
folded size	:	108 mm square

be readily obtained from standard green-sawn timber sizes. As an example, the 238mm brood chamber (full-depth Langstroth) depth was selected because it could be delivered from standard 250mm x 25mm green-sawn timber whilst providing for a satisfactory interchange of equipment.

A discussion on selected aspects of metrication is presented in the following sections.

Top-bar play

The top-bar play is the clearance between the end of the top bar and the inner rebated surface of the hive body. It is, in fact, the amount of "play" a frame has when suspended in a hive body. The top-bar play is determined by the length of the top bar and the inner rebated length of the hive body.

Of all the measurements affected by the interchange of metric and Imperial hive equipment, the top-bar play is the most critical. The ideal top-bar play should be no less than 1mm nor greater than 2mm otherwise the frames would be held either too tightly or too loosely within the hive body. The current top-bar play is 3/32in (2.40mm) with the Ministry of Agriculture and Fisheries Imperial top-bar specification and 1/16in (1.6mm) with the A. Ecroyd and Son 19in Australian pattern top-bar.

To maintain a full interchange of equipment there are only 3 possible measurements for the inner rebated length (484mm, 485mm, 486mm). The inner rebated length cannot be greater than 486mm otherwise standard 18.15/16in top bars would fit too loosely, nor less than 484mm, for then the 19in top bar would not fit satisfactorily. A metric top bar cannot be any longer than 484mm otherwise it would not fit within an existing hive body, nor any shorter than 480mm otherwise excessive top-bar play would result.

The adopted top-bar length of 482mm, inner rebated length of 485mm, and top-bar play of 1.5mm, recognises these limitations and also takes into account the thickness of the hive body and the "end bee-space".

End bee-space

The end bee-space is the clearance between the end-bar of the frame and the inner surface of the hive body. This measurement is determined by the length of the bottom bar and the inner length of the hive body.

There are three size options for the bottom-bar length in existence at the present time, ranging from 17 5/8in (447.7mm), for the Australian-pattern type, to 17 13/16in (452.4mm) for the Ministry of Agriculture and Fisheries specification. Inserted into a standard hive body with inner length of 18¼in (463.6mm), these frames leave an end bee-space ranging from 5.6mm to 7.9mm.

The recommended metric bottom bar length of 450mm, inner hive body length of 465mm, and end bee-space of 7.5mm, have all been selected because they are not only compatable with all existing equipment-types but they also improve the present imperial bee-spacing.

Hive body length, width and timber thickness

Metric specifications for these dimensions are directly related to other hive measurements, including the top and bottom-bar lengths, inner rebated length, top-bar play and end bee-space. The adopted measurements were selected after a detailed study of the options and their effects on the interchange of imperial and metric equipment.

Hive body depths

The brood chamber (full-depth Langstroth) metric hive depth of 238mm is 3.3mm (1/8in) shallower than the 9½in imperial hive body. The 238mm measurement was selected because it can be derived from standard-cut 250mm green-sawn timber after allowing for weathering, shrinkage and distortion. A shrinkage factor of anything less than 12mm cannot be quaranteed with 250mm undressed timber.

The 185mm-deep honey super (three-quarter depth Langstroth) and the 133mm-deep section super (half-depth Langstroth) have been selected because they are compatable with existing depths (184.2mm and 133.4mm respectively) and may be derived from 200mm and 150mm green-sawn timber.

The rebate

A rebate ledge of 10mm has been adopted. Thus the 20mm-thick hive body is divided 10mm and 10mm at the point of rebate.

Unlike the situation in Australia, the United States of America, Canada and Britain, New Zealand has preferred the

bottom bee-space Langstroth hive. This means that the frames are suspended high in the hive body, leaving the equivalent of a bee-space beneath the frames. The ½in (12.7mm) deep rebate, and 3/8in (9.5mm) top-bar lug thickness results in a 1/8in (3.2mm) space above the top bars.

The metric equivalents adopted in this report are a 13mm deep rebate, a 10mm top-bar lug, and thus a 3mm space above the top bars.

Frame depths

The depth of brood and honey frames, reflected by the length of their end-bars, is governed by the depth of the hive body and by the bee-spacing between hive bodies. The imperial specification provides for a 3/8in (9.5mm) bee space — the result of a 9½in (241.3mm) deep hive body and a 9 1/8in (231.8mm) frame depth.

A 230mm end-bar has been advocated for full-depth frames, thus providing an optimum 8mm bee space above and below the frames. A 177mm end-bar length is proposed for the 185mm deep honey super.

Sections

The imperial measurements for sections and section-holding frames are critical. Very little lee-way is available in the selection of metric units. In fact, existing full-depth section holders will not be compatable with the proposed 238mm deep hive body. As a result it is proposed not to make any metric recommendation for full-depth section equipment. Sections and half-depth section holders will retain metric measurements almost identical with existing Imperial sizes.

Interchange of equipment

A few problems can be anticipated in the spacing between hive bodies. If one standard-depth hive body, containing frames, is placed upon another during the changeover period there is a total of 16 possible combinations of bee-space between units. Between the present all Imperial equipment (total bee-space 9.5mm) to the final all metric situation (total bee-space 8mm) there are 14 other combinations of Imperial and metric hive bodies and frames.

During the interchange period the smallest "bee-space" will be 5.4mm. This will occur when the metric hive body containing Imperial frames is placed above an Imperial hive body containing metric frames. The largest "bee-space" of 12.1mm will occur when an Imperial hive body with metric frames is placed above a metric hive body with Imperial frames. These two extremes can be expected to disappear within 25 years with the replacement of Imperial frames by their metric equivalents.

If present equipment is any example, it will take longer than 80 years to completely fade out Imperial equipment. Preserved hive bodies and hive lids will last the longest. If it is assumed that the average life for a hive body is 40 years and for a frame 20 years, it can be anticipated that most combinations of interchange will have phased themselves out within 20-25 years. Within 30 years equipment will be substantially metric.

CONCLUSION

The metric measurements adopted in this report have been arrived at after an in-depth appraisal of the situation. Although some interchange problems are inevitable during the transition period, particularly with equipment that already departs in size from the Imperial specification, it can confidently be predicted that the metric hive will be an improvement on its imperial predecessor.

It is in a beekeeper's own interest that the metric dimensions specified in this report are adopted at an early stage. The timber industry intends milling timber exclusively in metric dimensions in 1975. New Zealand's major manufacturer of equipment has indicated that, as from April 1975, all hive equipment will be cut to the metric hive specifications adopted in this report.

To aid beekeepers in the selection and manufacture of metric hive equipment the Ministry of Agriculture and Fisheries will prepare a publication giving full construction details for its preferred range of Langstroth-type hive equipment.

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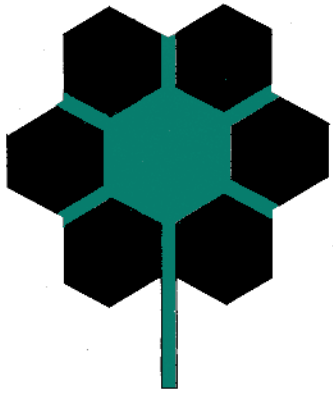


1974 BEEKEEPERS' SEMINAR TAUPO

TUESDAY — WEDNESDAY — THURSDAY

AUGUST 13 - 15, 1974

REPORT ON THE SEMINAR

By GRAHAME M. WALTON

THE 1974 BEEKEEPERS' SEMINAR, held at Taupo 13-15 August, proved to be a highly successful occasion. The Yacht Club Hall, overlooking the shores of Lake Taupo, provided a warm and comfortable forum for the two conference days. The whole Seminar programme evolved around "Honey — its production, processing, packaging and promotion." The choice of topics, speakers, and the field-day programme all amplified this theme.

The Ministry of Agriculture and Fisheries' Assistant Director-General of Agriculture, Mr M.L. Cameron, set the stage for the Seminar in his opening address. He welcomed those attending and he made special mention of our six Australian visitors. He then outlined the changes and pressures faced by agricultural producers in general, and apiculture in particular. He could foresee continuing periods of price fluctuations for our agricultural commodities. Mr Cameron recommended to honey producers that they take advantage of the "ups" in recent honey prices to weather any foreseeable "downs". With respect to honey quality Mr Cameron said it was in the Industry's own interest that the domestic and the international consumer

receives a clean, well presented, hygienically handled product. He was pleased to note that the programme gave due emphasis to honey quality and honey marketing.

In his opening address Mr Cameron also mentioned the three main roles of the Ministry — advisory, regulatory, and research — and he outlined the functions of the two Apicultural Advisory Officers; this included the organising of Seminars of this type. A special thanks was extended to the National Beekeepers' Association for their assistance with this Seminar, and in particular to Mr J.D. Lorimer who represented the Association on the Organising Committee. Mr Cameron said the objectives of this Seminar were three-fold: firstly to familiarise the Industry with recent developments in the field of honey — its production, processing, packaging and promotion; secondly, to acquaint participants with the people and services available from the M.A.F., and thirdly, to provide a venue for formal and informal debate and the sharing of ideas.

Mr G.M. Reid, Apicultural Advisory Officer, and Mr C.G. Rope, Honey Grader, examined the European draft standards for honey, called Codex Alimentarius. They explained how these, and honey quality standards generally, were likely to affect us. In a session titled "In and About the Honey-house" four M.A.F. speakers, Messrs D.A. Briscoe, R.H. Hobbs, B.M. Milnes and G.M. Walton looked briefly at selected topics: Shifting in the honey-house, flooring, using methyl bromide, and honey-house design.

In 1974 the Bee Research Association has been celebrating 25 years of activity by holding special events throughout the world. To commemorate this occasion in New Zealand Mr E. Roberts, a lecturer in Agronomy at Massey University, presented a most entertaining yet instructive address titled "Honey through the ages."

Of topical interest were the two talks given by the Health Department's Supervising Inspector of Health, Mr C.L. Barber, when he discussed honey-house hygiene and the packaging and labelling requirements of food. Two recent regulations, the Food and Drugs Regulations 1973, and the Food Hygiene Regulations 1974, the latter coming into force in January 1975, will have important consequences for all food producers and packers.

One of the Seminar's field-day hosts, Mr R.L. Jansen, gave a well received talk on how his enterprise utilises our bush honey areas. His hives are perhaps the most frequently shifted in New Zealand. In one trial last season 150 hives obtained an overall 24 tons of honey as a result of four movements to consecutive nectar-flows. In the same session Mr J.E. Rodie, Apiary Instructor, saw a future for bush honey production in the Taranaki and Wanganui districts.

In the final session of the first day three speakers examined the methods used in handling thixotropic manuka honey. Mr P. Pegram and Mr M.D. Haines explained the equipment and techniques used in their enterprises, and Mr G.M. Walton described new equipment that may be appropriate for handling this problem honey.

The second day of the programme was devoted to a field-day at two of New Zealand's leading honey-houses. Acacia Bay Apiaries Ltd., overlooking Taupo, has made major innovations over the last two years, and more are

planned. Mr Robin Jansen showed participants through his company's new honey-house. One could not help but be impressed with the design, equipment (most of it stainless steel) and the hygiene in the honeyhouse. Of particular interest were the cappings wax pump located beneath the automatic uncapper, the extractor control panel, the honey warming unit, and the newly-acquired Cook and Beals' honey-wax separator.

At the field-day many items of equipment, and new novel ideas, were demonstrated by beekeepers and by the Ministry. Seven trade displayers also exhibited their products.

After a very filling field-day luncheon buses took the group to Arataki Honey Ltd., at Waiotapu. This Company, with 14,000 hives and by far the largest in New Zealand, has a portion of its bulk handling plant at Waiotapu. The impressive scale of operations were highlighted by the 8,000 square foot honey-house and storage building, the four 30-ton honey tanks, the system of palletization and fork-lifting, and the sugar-syrup feeding facilities. Mr Russell Berry's skill in engineering was evident in the clever use of geothermal steam, the honey-pumping system and the automatic cleaner for section comb honey.

On Wednesday night participants at the Seminar were guests at a social and film evening hosted by the Waikato Branch of the National Beekeepers' Association. This was held in the luxurious surroundings of the Wairakei Tourist Hotel's Conference rooms. Three excellent international films on honey and beekeeping were screened for the occasion.

Honey marketing was the morning's theme of the third day. Mr A.B. Ward, a senior agricultural economist from Massey University opened the session by looking at honey marketing in general. In a well-rounded and an intentionally provocative presentation he examined the workings of New Zealand's primary producing bodies and how they served their industries. He questioned whether the honey industry, because of its small number of commercially viable units, deserved the supporting structure presently given to it by the Government and the Honey Marketing Authority. He regarded the present system of competition between the Authority and private packers on the local market as untenable and suggested that the best role for a Honey Marketing Authority was a supervisory one.

Next followed a valuable session on honey marketing within New Zealand. Three speakers, each involved in a different aspect of honey marketing, looked at the present situation, trends, potential and problems on the domestic market. Mr c. Wicht, General Manager of the New Zealand Honey Marketing Authority, examined honey in relation to the marketing of other food commodities. Honey today receives significantly less supermarket shelf exposure than it has had in the past. Mr D.L. Ward, a producer-packer, saw a healthy future for the industry so long as the Authority continued to remove surplus honey from the domestic market. Mr M. Stuckey discussed the methods of marketing and future potential for specialty honeys, including comb honey and floral source packs.

The overseas market, the situation, trends, and its potential, were discussed by Mr R.F. Poole, the Chairman N.Z.H.M.A., and Mr Stuckey on behalf of Mr P. Berry, a major comb honey exporter. Mr Poole discussed

Mr M.L. Cameron, Assistant Director-General of Agriculture, opening the 1974 Taupo Seminar.

the Authority's export marketing set-up and he illustrated the problems we faced in being a relatively small exporter of honey onto a weakening world market. Mr Berry's paper gave valuable tips on how to establish and promote a comb honey market.

A lecturer in Management Studies, Mr P.R. Dickson, capped the morning's session with a presentation of results of a recent housewives survey on honey purchasing habits. This was undertaken by students of Waikato University, Hamilton. It clearly established that consumers have preferences that are not fully recognized by honey-packing groups.

In the final afternoon session four Ministry of Agriculture and Fisheries speakers reported on recent developments, each liable to influence a crop of honey. Mr B.M. Milnes discussed the **Bacillus larvae** (American Foul Brood) situation, Mr G.M. Walton reported on the nation-wide Nosema survey undertaken in 1973. Mr D.A. Briscoe familiarized beekeepers with recent toxic honey and restricted zone developments. Mr I.W. Forster, from the Research Division of the Ministry, completed the programme on a high note by reporting on recent research work.

In concluding the Seminar, Mr E. Smaellie, Superintendent of Beekeeping, M.A.F., said he expressed the feelings of all those that attended in that it was a most successful Seminar. He paid particular thanks to the efforts of the Organizing Committee, and he expressed appreciation to the 160 people that attended from all parts of New Zealand, and from Australia. In looking at the interest generated by this Seminar, and the numbers of younger-generation beekeepers in attendance, Mr Smaellie said it was a healthy sign for the future.

Paper Presented at 1974 Taupo Seminar

MARKETING OF HONEY

By ALAN B. WARD.
Reader, Department of Agricultural Economics and Farm Management, Massey University.

HONEY IS THE MAIN product derived from bee-farming. This simple statement places the industry in the agricultural sector, where it belongs.

The production of honey faces the common problems of biologically orientated production. It also faces institutional problems common to the agricultural sector. The biological nature of farming implies a seasonal routine heavily dependent upon seasonal conditions. Our inability to predict future weather patterns thus injects a high degree of uncertainty into honey production. This instability in production can be gauged from the Twentieth Annual Report of the New Zealand Honey Marketing Authority (H.M.A.) for the year ended 31 August 1973 where a diagrammatic presentation of export sales made by the Authority over the last 10 years reveals an export of 227 tons in 1968/69 and 1996 tons in 1970/71.

As the H.M.A. is virtually the sole exporter of honey (with the exception of comb honey) and the estimated consumption of honey in New Zealand is constant, it follows that fluctuations in exports recorded by the H.M.A. represent seasonal changes in output. An uncertain and unpredictable output is a special feature of the honey industry and poses problems in the marketing field. Obviously, it is difficult to plan promotion and advertising campaigns when continuity of supply to an overseas market cannot be guaranteed.

Over the years, primary producers have sought and obtained collective security by the formation of statutory marketing authorities. These authorities have evolved as experience revealed that voluntary self-help co-operatives in the marketing field that attempted price regulation had a very poor survival rate.

The problem was simply that it was possible to enjoy the benefits of the marketing co-operative without subscribing to the cost of the organisation. Consequently, it was found necessary to make membership and subscription compulsory. This is the basis of operation for all our Marketing Boards and Authorities.

However, the functions of the various Boards differ widely. For example, the New Zealand Meat Board, despite being the first Board to be established in 1922, has until recently merely acted in a supervisory role. It has been responsible for negotiating shipping rates, establishing a grading system and assisting in promotion. It leaves the actual marketing to proprietary companies and does not exercise a trading function. The exception refers to the formation of the New Zealand Meat Export Development Company (DEVCO) which consists of New Zealand owned freezing works and the Board. DEVCO was established in 1962 and has exclusive rights to the North American lamb market. The Meat industry has recently been subjected to a Commission of Enquiry under the Chairmanship of Mr Arnold Nordmeyer and the Enquiry supported the principle of private enterprise trading under Board supervision.

The New Zealand Wool Board operates in a similar fashion, but it was intended that the Wool Marketing Corporation would take on a major trading role. However, producer resistance to compulsory acquisition has placed the Corporation in mothballs.

In contrast, the Dairy Board is the sole exporter of dairy products from New Zealand and owns marketing subsidiaries overseas. It has established brands and has responsibility for some products as far as the retail shop. The Dairy Board is not directly involved in the New Zealand market.

Perhaps the most complete functions are possessed by the Apple and Pear Board which markets all apples and pears both within New Zealand and overseas. It sells both fresh fruit

and a number of processed lines, from juice to pie-filling, through to apple wine. Control on the local market is effected by making gate sales in excess of two bushels per customer illegal and the Board is normally required to make occasional prosectuions of growers and/or retailers contravening the regulations. Finally, most horticultural products and many minor primary products possess no regulative body or authority, especially those products that are perishable and can be sold without processing.

The above review of some of the major Boards suggest that there is no single marketing organisation that is ideal.

The Honey Marketing Authority is unique in the sense that it operates both on the export and local market, where the bulk of sales on the local market are made by private enterprise. This has posed problems of an effective levy system with perhaps 1500 tons of honey evading payment. It is also significant that the H.M.A., unlike most producer groups selling on the domestic market, have no powers of supply control. The Town Milk Authority for example, exercises control by means of quotas, the Poultry Board operates an Entitlement Scheme and Hop Marketing Committee supervises contracts.

Mr Ian Clark, a Senior Agricultural Economist for the Commodities Section of the Economic Division of the Ministry of Agriculture and Fishers, writing on "local marketing of Agricultural Products in Marketing in New Zealand" (Hicks, Smith & Son 1973) in the section dealing with the H.M.A., concludes as follows:

> *"In general it can be said that the H.M.A. is neither particularly effective nor particularly ineffective in its local market operation, although it does contribute an element of stability to the industry."*

Certainly the Caucus Inquiry into the New Zealand Honey Industry suggested rather sweeping changes in the functions of the Authority. However, in the contuining tradition of National Beekeepers' Association (N.B.A.) Conferences, these were flatly rejected.

What is the nature of this industry that consists of less than 100 full-time commercial bee-farmers that warrants a properly constituted statutory marketing authority and occupies a disproportionate amount of Ministerial time?

There are 200,000 hives owned by 3,559 beekeepers in New Zealand, but only 48 beekeepers own in excess of 1,000 hives which would provide an acceptable full-time income. At the other extreme, there are 3,169 beekeepers with less than 50 hives. These hives produce an unknown quantity of honey bravely estimated by the Ministry of Agriculture and Fisheries around 3,500 tons per year. The average payout over the past 10 years by the Honey Marketing Authority is 13 cents per lb. which gives a total honey-house return of $1.5m. per year. Even at current retail prices the total value of output must be less than 5 million dollars. Since 1968/70 the pay-out has almost doubled and thanks to Mr Moyle (Minister of Agriculture) reserves total some $500,000. Despite this improvement in payout the industry's Association has teetered on the brink of insolvency in the recent past. The National Beekeepers' Association has had to accommodate subgroups such as the Packers' Association and the Comb Honey Producers' Association, whose aims and interests do not always coincide with those of the national body or those of the Honey Marketing Authority. Successful marketing is prejudiced under such conditions. It is my conviction that appeals for unity and loyalty are poor substitutes for removing the irritants in the system if that is possible.

In view of the size of the industry and the number of individuals actually engaged full-time in the industry, one obvious solution is to return to an unregulated market. This is essentially the system preferred by meat and wool producers — although both groups do operate a minimum price scheme. It is also the system that caters for fresh vegetables, possum skins, venison, comb honey, grass seed, race-horses and chinese goosberries (kiwi-fruit) to mention but a few.

Its main attraction would be that administrative overheads would be reduced to a minimum and the costly trading operation conducted by the H.M.A. would be unnecessary. Its major defect would be that if a really good honey year in New Zealand coincided with low export prices, there would be no protection from low incomes. However, it would remove the irritants from the system and beekeepers would be forced to direct their frustrations at the impersonal price mechanism rather than personalities occupying positions of responsibility within the

H.M.A. and N.B.A. In an industry where only 48 honey-producers own more than 1000 hives personalities must intrude.

At the other extreme the irritants would be overcome by making the H.M.A. responsible for the entire honey crop along the lines of the Apple & Pear Marketing Board. Private sales would be prohibited and private packers would be obliged to obtain their honey from the Authority. Beekeepers would receive an equalised pay-out which would be the same for all beekeepers.

There are obviously various possibilities between these two extremes, but the one untenable system is where private packers compete with the Authority on the domestic market, with the Authority having sole right of export. Here private packers regard the Authority as subsidised competition per medium of the seals levy. The Authority must compete for supplies, and hence suppliers to the Authority are more esteemed than suppliers who sell to private packers when prices are good, but use the Authority when prices are low.

The Authority is charged with improving the honey industry in general, not its own suppliers in particular. The Government Caucus Committee investigating the Honey industry discussed this issue at length and as their report was distributed to all beekeepers owning more than 30 hives, I assume that these arguments are appreciated.

My own preference is for the H.M.A. to adopt a Meat Board type role — namely, supervisory, with responsibility for market information and industry promotion. It would licence packers whose plant and equipment met acceptable standards and its stabilisation role would be performed by seeking tenders for honey in periods of low prices. Only licenced packers would be permitted to export and the Authority would administer minimum export grades and prices.

• The present system has not and cannot work particularly well. Beekeepers insist on being rugged individualists and on changing their minds rather frequently — almost as frequently as General Managers of the Authority. Less than 100 beekeepers can be considered full-time commercial operators and yet the Ministry of Agriculture and Fisheries provides two Apicultural Advisory Officers, nine Apiary Instructors, a Superintendent of Beekeeping, two research workers and supporting technicians, a Honey Grader and the Government representative on the H.M.A. This contribution is probably worth $200,000 per year. In addition, the N.B.A. absorbs $12,000. The H.M.A. owns three processing plants, each requiring a salaried manager. But of the total H.M.A. costs of $431,235 for 1972/73 year let us assume that $100,000 is incurred in assisting the industry in a general administrative sense. We come to the conclusion that in excess of $300,000 is required to administer an industry on which only 100 beekeepers are totally dependent.

Market research and honey promotion are conspicuous by their absence. The smallest item listed in the income and expenditure account of the H.M.A. in 1972/73 is advertising at $8. A study conducted by Messrs. Thirkell and Wilson, business students from Victoria University, Wellington, and entitled "Honey Marketing in the Wellington Area" (3 October 1973) — commented as follows:

"The Honey Marketing Authority undertakes no promotion of its brands of honey and any promotion undertaken is devoted solely towards 'educational' purposes."

They also suggest "that it is more profitable for producers to fully market their own products or to sell to packers rather than to sell to the H.M.A. The latter choice provides a premium of six cents per lb. and the former to our minds is even more profitable."

Again, the above survey revealed that for Wellingtonians, while 78% of homes surveyed in honey in the house at the time of survey, only 18% of those responding could recall the brand purchased from memory. They comment on point of sale promotion as follows:

"We were unable to find any promotional activities undertaken by potential competitors and displays in retail stores ranged from satisfactory to very poor. Often honey products were in an obscure part of the store and to be frank some of the displays were very dusty and had the appearance that no honey had been taken off the shelf in the last six months. The often dull and unappealing packaging did not help the situation."

Doubtless this report by the two business students from Victoria University will be denounced

by the industry in the same way as the Bale Report, prepared by Mr M.D. Bale of the Department of Agricultural Economics and Farm Management, Massey University, was denounced back in 1967. However, the fact remains that all the reports that do exist dealing with aspects of honey marketing suggest that improvements could and should be made.

The New Zealand honey exports account for between 1 and 2% of world trade in honey, and are equivalent to 3% of West Germany's imports. Only 100 beekeepers are totally dependent on bee-farming for a livelihood. Domestic consumpation per head is one of the highest in the world, the bulk of which is supplied by private packers. These facts suggest that the superstructure of a statutory marketing authority with a trading function is inappropriate and excessive for the size of the industry where the majority of the participants must be classified as hobbyists or part-timers. Structurally the Authority's trading function must incur higher costs than those of the private packer. It is my belief that the objectives of the Authority can be achieved in the absence of a trading function and result in improved returns to honey producers.

A healthy and viable honey industry is vital to the well being of other primary industries, especially those engaged in fruit and seed production. With this in mind, and fully aware of the likelihood of reduced prices for honey overseas in the near future, I reiterate that a supervisory role as opposed to an active trading role by the Authority, would greatly reduce the source of conflict within the industry and permit time and effort currently devoted to dissension to be directed more productively to the production, promotion and marketing of honey.

I have already mentioned that New Zealand has one of the highest per capita consumption of honey ratings in the world. This has been achieved in spite of an almost total lack of market research, promotion, brand creation or product development by the industry. The only way in which I can explain this apparent paradox is by recalling that the H.M.A.'s payout of the past 10 years have averaged 13 cents per lb. At that sort of price, who needs marketing!

On the other hand, if you are selling 26 ounce bottles of sweetened flavoured carbonated water at 40 cents, you must have and do find marketing.

In New Zealand some 80% of the population suffer from malnutrition, mainly because they eat too much. We enjoy cheap meat relative to many other countries, yet Kentucky Fried Chicken with the help of the Colonel's recipe has successfully penetrated the New Zealand market. Certainly this was not achieved by being price competitive, but by a carefully researched marketing package. Thus marketing-wise, the New Zealand honey industry has still some way to go.

Before the group of those attending the Seminar, Mr Russell Berry of Arataki Honey Ltd. explains their method of operation.

Paper Presented at 1974 Taupo Seminar

MARKETING OF HONEY WITHIN NEW ZEALAND (1)

A session in which three speakers, each involved in different aspects of honey marketing, were asked in their 10-minute talks to comment, as they see it, on the trends, the potential and the problems for honey on the internal market

by CURTIS WICHT
General Manager, New Zealand Honey Marketing Authority

AFTER LESS THAN three months' experience in the beekeeping and honey industry, three days of a National Beekeepers' Association Conference, two days of this Seminar, I feel somewhat diffident in addressing a Group so knowledgeable as this, yet I feel very optimistic for the future of the Industry. Beekeepers, executive and officials have been very kind to me here and at Palmerston North. Although I have no experience in this Industry, I have had over 23 years experience in Sales, Sales Management, Marketing and Marketing Management, and have been fortunate in studying marketing in New Zealand, Australia, the United States and the United Kingdom.

My experience has been the marketing of food, honey comes within that category. One cannot but be amazed to find how little the principle of good orderly marketing varies from one country to another and from one product to another.

The problems are not dissimilar. Market trends follow similar patterns and good marketers use very much the same rules to achieve their objectives.

Perhaps the most misunderstood function and the most incorrectly defined word in business parlance today is "Marketing". I have heard it described by top business and management people, who should know better, in so many incorrect ways. I have heard it described as the function of Production, of Sales, of Merchandising, of Advertising, and in so many other ways. In fact, all these functions are embraced in marketing, but collectively, not individually.

Briefly, I define marketing as the process of determining consumer demand for a product, motivating its sale and its distribution into ultimate consumption at a reasonable profit.

Because a weak link in a chain can prejudice the ultimate success of a product or a service, then a marketer must be involved at every stage to ensure that the total policy carries through to the end result.

Competition has been greatly intensified, it is becoming more so, and the policies and the practices of as recent as 1972/73 may not be good enough for tomorrow.

New Zealand is following world patterns. Big businesses are getting bigger. Small businesses are getting smaller. So, too, big industries are getting bigger and more sophisticated. They must do so to survive.

Ten years ago 85% of the retail business was done by the small retailer who represented 85% of the retail shops. Today the small retailer accounts for less than 28% of the dollar volume of food retailing and 45% of the shops now account for 95% of total retail sales. Extending further, 15% of the shops now account for 70% of retail sales.

So Retail Shops (Supermarkets) are getting bigger and more effective and are thus more influential on the market. Ten years ago, honey represented and commanded more shelf space than it does today, despite the fact supermarkets are 10, 20 and sometimes 50 times larger.

As recent as the 1960's one in three families were using honey at some time during the year, and consumption was estimated at about 4 lbs. per head; therefore, users were consuming about 12 lbs. per family per year.

Estimates for 1973 suggest that less families are purchasing honey. Less honey is being consumed and perhaps the most significant factor highlighted is that the incidence of honey purchasers and, therefore, ultimate consumption, is in the older age group. Young housewives are not purchasing honey in the same relative volume as their mothers.

If this is so, there will surely come a time when, as the older people pass on and a younger generation comes forward, honey users and buyers will become fewer in number.

Out of every dollar earned, approximately 20c is spent on groceries in New Zealand. Amongst the many interesting statistics, is the comparison over a 10-15 year period between Jams and Spreads and Honey. While Jams have doubled sales, and presumably consumption, Honey has declined by over 50% in the corresponding period.

Predictions are that by 1980 there will be 20,000 different lines introduced for grocery sales. Thus display and shelf space will be very much in demand.

A 40% decline is also predicted in the number of stores, thus the pressure on shelf space and display space is going to become very heavy indeed, and only the most sophisticated marketers will be able to maintain exposure and shelf space. And this is happening at a time when honey has so many things going for it.

There has never been a time when people have been so conscious of pollution, the importance of clean air, environment and environmental influences, Health Foods and a mother's natural protective instinct for her family and their well-being.

If a product can truly and honestly make claim for Health and Goodness, then price is not necessarily the determining factor.

The housewife of New Zealand will pay for quality, goodness, particularly nature's goodness — and will stay with it. There are, however, certain conditions and factors she will demand — Consumer Testing and Market Research is showing this up very clearly.

She wants a product to be good and remain good. If she buys a sub-standard product, she can, and does, turn off that product, and never buys it again. This is a proven fact. She can buy 1000 products, yet if one is bad or sub-standard, she will remember that one, and completely forget the 999 good ones purchased.

So perhaps less No. 1 is to make sure that one markets a product to a good standard and to a consistently good standard, and any supplier who puts a sub-standard product on the market is not only doing a disservice to himself, but also to the Industry.

Mrs Housewife, who undoubtedly is the most courted, studied, researched, and the most influential person in the retail world today, because she, in her very complex way, holds the key to the success of all consumer business, is demanding her products presented in a hygienic, easy-to-use and to re-use container.

I wonder if the honey industry is giving sufficient consideration to her wants, her whims and her purchasing dollar?

I believe the dairy industry were guilty of neglecting the housewife's constant request for soft spread butter, and it almost cost them dearly, and may well still do so.

The wool industry were negligent — they just made wool because it was wool, and neglected some of the important marketing factors which synthetics were able to meet — colour, lightness and continuing research to study consumer needs.

I wonder, ladies and gentlemen, if it may be later than we think? Should we not now be taking action to project honey? Tell people about its goodness. Tell people about the clean good air from which honey is produced. Tell people of the energy factors and the benefits of honey. Tell people what honey can do for them and their children.

Should we not be considering packing in a manner more acceptable to the public and to a standard of quality acceptable to them and of which this industry could justly be proud?

Ladies and gentlemen, this industry stands at a cross-roads, where it can either go downhill, and at an ever increasing rate, to become and remain a cottage industry — because you cannot

stand still — the direction is either forward or back — or you can double your potential users by applying good sound marketing principles to the industry.

The choice is yours, but time is not on your side. There have been more changes made in this century than since the beginning of time — more changes in the last 10 years than the previous 60. There will be more in the next five years than the last 20 years.

If this industry can work together in unity, with goodwill, with purpose, and with defined marketing objectives, it must progress, and progress is the one and only way I know to financial reward.

Paper Presented at 1974 Taupo Seminar

MARKETING OF HONEY WITHIN NEW ZEALAND (2)

by DUDLEY WARD
Kintail Apiaries Ltd., Dannevirke

ON THE NEW ZEALAND market the independent packer and producer-packer plays a vital part in the chain of marketing events from the bulk product to the consumer's cupboard.

To discuss the future potential, trends, and likely problems for the independent honey packer on the local market I must briefly comment on honey production and marketing generally, and the Honey Marketing Authority's policies specifically.

New Zealand's honey crop is disposed of mainly through three channels. About a third is sent to the H.M.A. and this may be sold either on the domestic or the world market. A third is handled by New Zealand's private packers (or producer-packers) and is sold in retail packs on the local market. The remaining third is produced by amateurs and part-timers and is consumed and distributed at local levels.

Most of the honey produced in New Zealand is consumed within the country. In fact we are approaching the stage where, within 20 years, we may well need to import honey to meet local consumption. At the present time however our surpluses are very seasonal. Some years we have almost no surplus, and in other years we have up to 2,500 tonnes. Because the Honey Marketing Authority has sole right to export bulk and retail-pack honey it is their marketing policies that seal the fate for all honey producers, whether they supply to the Authority or to an independent packer.

In years of surplus and with good export prices for honey, as has been the case for the last few years, the H.M.A. has exported most of its takings, which has led to better returns for all producers and to an orderly New Zealand market. The Authority should be complimented for this. Prior to this time the H.M.A. did not pursue the export market with any degree of vigor because it believed it could get a better return on the new Zealand market. Personally I disgree with this.

In the 1961-1971 period the H.M.A. made little attempt to develop its export market, despite the fact that New Zealand produces a variety of unique sources of honey that must surely appeal to the overseas gourmet-type market. The H.M.A. preferred, on the other hand, to compete on the local market with the independent packers, even in years of over-production. The average payout of just 11 cents per pound, which varied little over a ten-year period until 1971, is undoubtedly a reflection of these policies.

What does the future hold for private packers, their suppliers, and in fact the whole honey industry? The answer depends on the H.M.A., its marketing policies, and its method of operation. At the moment there appears to be a turn-around in the price for honey on the world market — with a very slow movement of honey. If the H.M.A. decides to give up an active investigation of the external market and the removal of suprlus New Zealand honey in favour of supplying the New Zealand market, then the New Zealand producer, whether he supplies to the H.M.A. or a private packer, may well be in for tough times. An over-supply on the New Zealand market will cause havoc to orderly marketing, with prices stagnating or slumping.

If the H.M.A. does in fact start to compete vigorously with private packers then a price war/special offers may result. This is the last thing that I would like to see. It would affect all independent packers and their suppliers, and in particular it would affect the H.M.A., its payout, and of course, it suppliers.

In relation to the H.M.A. the independent packers' overheads are moderate. Such H.M.A. costs as honorariums to board members, travel and hotel expenses for all meetings, capital costs on its various plants and equipment are all high in relation to the volume of honey the Authority handles. The independent packer is able to ensure that a more competitive market is available to the producer and to the consumer. He is generally able to buy honey from producers in his own area, and hence lower freight costs from which the producer would obviously get the benefit.

A healthy, competitive marketing system ensures the continuance of efficient producers and efficient packers. The inefficient or the uneconomic will fall by the way-side.

For an orderly marketing system of benefit to all, I would support the views of the economist who addressed the meeting this morning — Mr Alan Ward (incidentally, he is no relation) — when he said that it was unworkable when a primary producing body such as the H.M.A. is in competition with independent marketers on the domestic market. For the small size of our industry, free, independent, and unsubsidised competition should be the system of marketing on the local market — as is the case for most food commodities.

We should have a Honey Marketing Authority, but I believe it should concentrate on promoting New Zealand honey nationally and internationally, setting quality standards, and establishing minimum prices for the export of honey, above which independent packers should be free to export. In due course, when New Zealand becomes forces to import honey, the need for such a primary producing body will be over.

Paper Presented at 1974 Taupo Seminar

MARKETING OF HONEY WITHIN NEW ZEALAND (3)

by MICHAEL STUCKEY
Waitemata Honey Co. Ltd., Redvale, Auckland

MY SUBJECT IS specialty packing honeys and I see my role here not as one to tell how we go about it but rather I feel it would be of more value to explain why we do it. With the fantastic crops and high prices I hear we've been getting I am sure some of you have considered buying a new car recently, perhaps you went to your local Ford dealer. Here are some facts which could be of interest for reasons which I hope will become clear as I proceed.

Take for instance the Escort range. One basic car and the van. In the car line you get the choice of one or two doors 1100 or 1300 cc motor; so far six choices. With the 1300 you get a choice of manual or automatic — 9 choices. Then there are three factory fitted options — 36 choices, 3 trim colours — 108 choices, 9 paint colours — 972 choices. You can always have other major extras. Out of 50 or more I chose the 8 most popular, this gives 247,860 choices and Ford have another 5 lines in full supply in N.Z.

According to the N.Z. dealers this is only a small part of their world production. On top of this there are 11 major producers in the world and many more smaller ones making about 50 all told. In America last year, figuring all possible combinations of styles options and colours available on a certain new family sports car, a computer expert came up with 25 million different versions of it for a buyer.

I hope by now you are wondering what I am getting at. It's very simply this. Here we have an example of a large International Company selling in a competitive market. They are doing their utmost to vary the product as much as possible. In this way they give their customers a choice of their products instead of just the choice between a Ford or a Dutsun. This is how we see our business. We started producing Manuka, Clover and sections — the customer had 3 choices. Now we give the customer 8 choices, not counting sizes or different types of containers. Taking size and containers into account we have 28 different packs and flavours.

We are trying to give our customers the choice in quantity, flavour and form. We have proved to ourselves that with a good product present well any honey is worth top price. It is a shame that there are still some beekeepers mixing their honey into a bland sweet spread with no character. We are guilty of this ourselves to a certain extent. We produce a honey some years in the Auckland area called Hangi Hangi or pig weed. This honey tastes vaguely like a pig sty smells and we blend it in with our manuka in an effort to make the manuka go further and yet there are some people who like the taste of it as a straight line. Also this year, because of the failure of the Manuka crop, we have had to buy up any strong tasting honey we could find and sell it as a rich flavoured honey under the Manuka label, but we hope this is a temporary thing. Incidentally all our honeys are the same price but judging by the way the Manuka is gaining in popularity it may not be long before it fetches a premium.

To get back to the cars. — While the quality may leave something to be desired the presentation is really fantastic and the promotion is terrific. We must realise that because of their size they do have first-hand access to experts in the field of presentation and promotion, but we too could have access to these experts. If you take a little time to examine our 70 gram pack you will see an example of this. This pack was designed by the N.Z. branch of a large international company, E.S. & A. Robinson. It was designed for the overseas market and the idea is that it is supposed to give the impression of an unpolluted environment. It is a good pack, probably one of the best honey packs in the country and is a good example of what can be achieved by buying the right sort of experience.

There is an important lesson to be learnt here, the pack must be designed to complement the product. We have endeavoured to do this to the best of our ability. The 70 gram I have already mentioned, the 1 lb pots and jar labels are designed for the N.Z. maket. They are supposed to show the different varieties by the use of different flowers on the label. I feel that the honey industry is about three parts through the change from blended honeys to specialty packs at the moment. This is good if perhaps a little behind the rest of the modern world. Philip Morris cigarettes for instance. For 21 years they sold one major brand of cigarette and since 1954 they have introduced six new brands with so many options on size, filter and menthol that in America the smoker has a choice of sixteen different variations.

Have a look at the selections of Watties baby foods now available, the choice must be bewildering to the young mother and there are new varieties coming onto the market almost weekly, yet not so long ago the choice was negligible. What is the choice of honeys? — some producers do have a selection but more could be done. Thyme honey is sold overseas in some places for a very good price and there are many different types of honey produced in a small way in N.Z. today which are regarded almost as a nuisance, but I'm ready to bet there is a market for them somewhere if they are well turned out. Furthermore these honeys should be getting a premium price, both for the producer and packer. After all in many cases it is more expensive to produce a straight line of a source than simply to dump the whole lot into a tank

and mix it up.

As an industry we must accept that we live in times of accelerating change. Whereas Mary used to buy brand "X" because her mother and grandmother bought it, nowadays Mary's daughter is being offered such a bewildering array of varieties of any product that any producer who only offers one choice stands a very good chance of being left behind. On the other hand once Mary has found a pack or packs which fit her requirements they must be always available to her.

You will all have seen how honey is being used to sell other products, for instance — biscuits, baby foods and drinks etc. Isn't it time someone in our industry used our honey to sell someone elses product. This would seem to be the next logical step in the specialty packing of honey. For instance I feel sure there would be markets for the types of spread sold overseas such as honey and apricot, honey and peanut butter, etc. The future of honey packing in N.Z. relies, in my opinion, not only in consolidation of what we have now but in further diversification.

People now have more to spend and a few cents extra on a honey pack doesn't mean the same as it used to. The honey packers in N.Z. are not really competing which each other for a share of the market, they are competing with all other producers of spreads and foods throughout the world and this is a very different ball game.

Paper Presented at 1974 Taupo Seminar

MARKETING HONEY OVERSEAS (1)

A session in which two speakers, Mr R.F. Poole, Chairman of the N.Z.H.M.A., and Mr P. Berry, a major comb honey exporter, were asked to comment on the situation, trends, potential and problems in exporting their respective products.

by RUSSELL F. POOLE
Chairman, New Zealand Honey Marketing Authority

EXPORT OF BULK HONEY

FIRST LET ME give some outline of the history of the Honey Marketing Authority and its operations on the overseas markets over the years of its existence.

The Authority was formed as a producer board to take over the honey marketing operations of the Internal Marketing Development, a Government Department which had, during the 1939-1945 war years and for some time thereafter been selling honey and other commodities which had been commandeered by Government as a wartime emergency. The new Authority endeavoured to find an overseas based selling agent, and the logical place to look was Great Britain as this country's trade was almost wholly still in this direction. Two offers were made to the Authority and the one accepted was from Kimpton Bros. (Red Carnation) Ltd. who were prepared to sell honey on a commission of 4% up to a certain figure and 50% on the balance of the sale price over and above the base figure. This base figure was set by agreement between

the Authority and Kimptons and it was a different figure for each grade or category of honey. These agreed prices became known as the "category prices" and the amount obtained by Kimptons above these category prices became known as the "overprice" and the commissions were called the "basic commission" and the "overprice commission".

Within a very short time Kimptons approached the Authority and offered to reduce the overprice commission from 50% to 20%, and this was the figure at which it remained until about 2 years ago. During most of this time, the Authority contented itself with advising Kimptons from time to time of what honey was available and waiting for Kimptons to sell it. On the face of it, this overprice commission arrangement seemed advantageous to the Authority in that there was a strong incentive for Kimptons to obtain as high a price as possible above the best price, and consequently a better return for the Authority.

One disadvantage was that when honey was meeting a poor demand Kimptons would be reluctant to sell, and if this coincided with high stocks being held by the Authority and payments to beekeepers were to be met, a severe strain could be placed on the Authority's financial resources. Another aspect was that sales were made in pounds sterling, and proceeds were only remitted to N.Z. after Kimptons had been paid by the buyer. This meant that the Authority was often not paid till 6-9 months after shipping the honey, and in many cases 12-18 months after paying the beekeeper his advance payments for the honey. Also, adverse changes in currently exchange rates sometimes meant the Authority received less than what had been anticipated at the time the sale was made.

The Authority's overseas sales and been bulk honey, and eventually moves were made to export in retail containers as it was felt that higher returns could be obtained this way. The Authority was in the awkward position of being cautious of generating too much demand for packed honey in case it could not give continuity of supply, there being no compulsion on beekeepers to send their honey to the Authority to ensure it of a steady level of intake. In selling packed lines there were other difficulties which did not exist with bulk honey. Every country had different regulations relating to size and shape of containers, the net weight of contents, the material from which the container was made, the information required on the label, or in some cases not allowed on the lable. For example our usual label in N.Z. says "pure N.Z. Honey" but some countries will not allow the world "pure". Despite these difficulties the Authority over the years has built up a reasonable volume of exports in retail packs to U.K. Australia, Japan and a number of South East Asian countries.

Some 2½ to 3 years ago Japan, which had bought mainly from China, came on the world market seeking large quantities of honey, and about this time the Authority had large stocks unsold as Kimptons were experiencing difficulties in moving the quantities being offered them. The Authority was therefore fortunately placed in being able to sell to Japan at better prices than in England, and on much more advantageous terms. Once the honey was loaded on the ship and the documents lodged with the bank the Authority was paid for the honey, and although the sale was still made in a foreign currency, the time between selling and being paid had been shortened to the point that many shipments were paid for shortly after the honey was received from the beekeepers.

In all this, the amount of honey exported by the Authority has not been high in relation to world imports. Japan, Germany and U.K. between them import well in excess of 50,000 tons annually and N.Z. only exports about 1,000 tons annually, and herein I feel lies our weakness. We are not looked upon by any of the importing countries as one of their main suppliers, but are regarded more as someone to turn to when they cannot get their requirements from their main suppliers.

Another problem which the Authority faces in trying to establish itself on the export market is its inability to guarantee continuity of supply, due mainly to the fact that it has no guarantee of supply from the N.Z. beekeeper. Many beekeepers tend to regard the Authority as a buyer of last resort — a sort of benevolent institution always there to take whatever honey they could not sell elsewhere, and give them a better price for it than they could otherwise get themselves. Some of these honeys require re-melting and blending to remove strong flavours or reduce moisture content, and in many cases would be, if not unsaleable, certainly unexportable in the condition in which they left the beekeeper's premises. It has been the preponderance of these problem honeys which over the years have contributed to the low payments by the Authority,

and which could reduce payouts in the future, if as would appear, the overseas price boom of the last 18 months is over.

As with all selling, the customer is always right, and if what you are selling, or the manner in which you are presenting it is not what the customer wants, then it is necessary to either comply with his requirements or lower your price. In many cases the beekeeper regards his job as being to remove the combs from the hives and extract the honey from them. What happens after that is someone else's job and it is over to them how they go about it. This is just not the case, and every beekeeper should endeavour to present his product in the form most acceptable to the customer.

In many cases, the beekeeper tends to regard the Authority as an organisation laying down conditions to make life difficult for him, when, in fact, the conditions are aimed at meeting the requirements of the Authority's customers and as the Authority is the beekeeper's selling organisation, then the Authority's customers are the beekeepers' customers. One example of what may be required in the future is that all 44 gallon drums contain the same weight of honey. We are the only country selling to Japan which has drums of varying weights of contents, and some Japanese buyers have indicated that they may not be prepared to accept this state of affairs much longer.

It would seem that N.Z. will have an exportable surplus for some time to come, and it is also likely that South East Asian countries, such as Japan, which are becoming more Westernised in their living and eating habits, will continue to require increasing amounts of honey. However their ability to pay the price levels acceptable to us to maintain our standard of living is conditional on the consumers in these countries having a living standard and wage high enough to allow them to buy our products, which, after all, is not an essential part of their diet, but more of a luxury food.

What is the position today overseas and how would the N.Z. beekeeper have fared without an Authority and being left free to sell overseas himself? Up until about three years ago, the prices obtainable overseas were less than could be obtained on the local market, and few, if any beekeepers would have wanted to export.

With the recent improvements in overseas prices however, there was much more incentive for the beekeeper to export himself, and this was aggravated by the decision of Government to limit the price payable by the Authority to the beekeeper. Our neightbouring beekeepers across the Tasman had no such restriction, and their incomes reflected the high world prices. There was an upsurge of interest in beekeeping, and manufacturers still have backlogs of orders for hives and honeyhouse equipment, with established hives being sold at prices around $40 — $45 each.

But what is the position right now, when overseas demand and prices have dropped? I was in Australia at the beginning of last month, and spoke to many beekeepers from all of whom I heard the same story. "All my drums are full of honey, all my supers are back on the hives and are full of honey ready to be extracted, but no one is buying honey. I'm just waiting to see what will happen, but I hope something will happen soon because I need some income." Many of them spent some of last year's record incomes on expanding their outfits, thus producing more honey this year to add to the already embarrasing amount being offered to Australian exporters.

Some other world reports received recently are:-

U.S.A. — Most Southern States are experiencing poor crops with estimates ranging from 60% of last year to the worst crop for more than 20 years.

Canada — The season is a week or so later than usual due to cool weather and copious rain. There are estimates of as much as a 10% increase in total colonies to go into production.

Argentina — Due to an internal export tax of 29%, most beekeepers cannot economically export at present prices, and are retaining most of their 1974 crop, while they try to get the export tax eliminated.

Brazil — 1973-74 crop is up about 30% on the previous season, with export prices at 42-43c U.S. per lb.

Germany — Buyers are reported to be in possession of sufficient stocks to last for a few months and they view the current prices as too high. With sizeable quantities still in Argentina and Mexico, buyers prefer to hold back hoping for further price decreases.

Japan — Still has stocks from last year's buying, and buyers do not appear anxious to obtain further supplies other than at bargain prices.

To summarise, I would say that —

1. New Zealand will have an exportable surplus for the foreseeable future.
2. New Zealand's exports of honey are insignificant by world standards, and cannot hope to influence world market price trends.
3. Our best hope of improving overseas returns is by every beekeeper doing his upmost to improve the standard of his honey so that our honey sells by quality and reputation, and thus commands a premium price.
4. We should concentrate our efforts on a small number of importing countries, as the quantities we have available will not allow us to guarantee continuity of supply to a large number of buying countries.
5. The concentration of export selling in the hands of one organisation makes for greater stability than can be expected if every beekeeper were allowed to export his own honey.

Paper Presented at 1974 Taupo Seminar

MARKETING HONEY OVERSEAS (2)

To a comb honey producer and exporter it is the marketing of his product that often proves to be the most harrowing. Over the many years that we have been exporting comb honey we have learnt many things and I wish to pass on a few tips.

by PERCY BERRY
Arataki Honey Ltd., Havelock North

EXPORT OF COMB HONEY

A. PROCEDURE FOR THE EXPORT OF COMB HONEY

Before loading on board ship.

1. Negotiate sale and obtain written contract from buyer setting out, in particular, the documentation required for the consignment.
2. Book shipping space.
3. Have honey graded by Ministry of Agriculture and Fisheries and obtain grade certificates.
4. Forward to the Shipping Company:
   Application for permission to export (Customs Form No. C 326) — 2 copies.
   Export Entry (Form 22) — 7 copies. Quote weights in kg, export code No. 061.600.0
   Grade certification — 1 copy.

When Honey has been loaded

5. The shipping company will return two negotiable bills of lading, two non-negotiable copies and a freight account, plus the approved Applications for Permission to Export and several copies of the Export Entry.
6. If the buyer requires that the bills of lading be marked "freight pre-paid", see that this had been done.
7. Deliver toyour bank the documents required by the contract or in the letter of credit, if applicable. These documents would usually comprise two sets, each containing:
   Negotiable bill of lading, endorsed on the back.
   Invoice in triplicate.
   Certificate of Origin, usually form XS 112 for the United Kingdom. Have this form certified as correct by the local Chamber of Commerce for shipments to Europe — usually two copies. Exports entry — 1 copy. Draft from the amount of the invoice, drawn for payment in accordance with the terms of the contract.
8. Airmail a non-negotiable copy of the bill of lading, an invoice, Certificate of Origin and Export Entry to the buyer.

B. METHODS OF PAYMENT

It would be usual to require the buyer to establish a letter of credit for the value of the order. The money is then waiting for the exporter at his own bank in New Zealand as soon as the goods have been shipped and the required documents produced to the bank.

This does not necessarily mean that the buyer has to actually find the money before the letter of credit can be established. Payment is not made until the date specified in the draft, although the buyer will pay interest from the date the exporter received payment in New Zealand until the buyer pays for the goods in his own country.

The documents are sent to the New Zealand bank's agent in the buyer's town. The draft must however be accepted (that is, signed or "sighted") by the buyer before he can obtain the bill of lading, which represents the authority to collect the goods from the wharf. Depending on the terms of the deal, payment for the draft may be:

1. At "sight" which means that the buyer pays as soon as the documents arrive at his bank.
2. A specified number of days after "sight."
3. On arrival of the goods.
4. A specified number of days after arrival of the goods.

C. EXPORT GUARANTEE INSURANCE

In some circumstances exporters are able to take out insurance against non payment by overseas customers. This insurance is undertaken by the Export Guarantee office, a subsidiary of the State Insurance office.

Details are as follows:

1. A policy is taken out with the Export Guarantee Office and a small deposit premium paid.
2. The approval of the Export Guarantee office for an insurance cover must be sought before shipping any goods in respect of which the insurance is required.
3. After checking on the credit rating and the general standing of the buyer the Export Guarantee office will either approve insurance up to a specified figure or will decline to grant any insurance.
4. When the goods have been shipped a return is made to the Export Guarantee office and the appropriate premium paid.
5. The premium rates vary according to the credit grading of the buyer's country and the length of credit. The premium rates for the lowest risk countries range from 18 cents per $100 for "sight" transactions to 32 cents where payment is made 180 days after "sight" (i.e. acceptance on the draft by the buyer).
6. If a buyer defaults the Export Guarantee office will pay the exporter and try to recover the debt from the buyer.

D. INCREASED EXPORT INCENTIVE

For many years now there has been a taxation incentive for increasing your exports of commodities which are outside the basic primary products. Comb honey has qualified for this

incentive, but not bulk honey or crude unrefined beeswax.

In 1973 the qualifying products were amended by deleting all honey but I understand that, in response to the comb honey producers' representations to a special committee set up for the purpose, it is likely that comb honey will once again qualify.

The incentive may be summarised as follows:

Twenty percent of the amount by which exports exceed the average exports during the "base period" may be deduced from your profits before taxation is assessed. The "base period" is the first three of the six years immediately preceding the year of income.

For example, if the 1974 financial year exports are $20,000 and the three years 1968, 1969 and 1970 averaged $15,000, then $1,000 (20% of $5,000) may be deducted from your income before taxation.

If a company is paying 50 cents in the dollar taxation, the tax saving is equivalent to 10% of the selling price of any qualifying increased exports. In other words a New Zealand exporter has a 10% price advantage over competitors from other countries who do not have similar concessions.

Additional comments by: Mr Michael Stuckey, Waitemata Honey Company, Redvale, Auckland.

[*Mr Stuckey delivered Mr Berry's talk on his behalf. In presenting this address Mr Stuckey raised other points worthy of note.*]

Comb honey production and its marketing has developed slowly but steadily. It has progressed at its own pace. Personally, I have found comb honey to be far more challenging and rewarding, than bulk honey production. A degree of achievement is obtained when you can see a product pass through all its stages; from its production, to its packaging, labelling and dispatch as a retail commodity.

If you intend to go into comb honey production, don't jump in boots and all — try 10 hives, not 100. There are plenty of people to help, including the Comb Honey Producers' Association, and the Trade and Industry Department. In selling your comb honey make sure it is a "subject to supply" contract, just in case you have a crop failure.

This 8-ton truck and trailer, capable of carring 1000 supers was one of the items on display at the Seminar.

Paper Presented at 1974 Taupo Seminar

THE PACKAGING AND LABELLING OF HONEY

by C.L. BARBER
Supervising Inspector of Health, Health Department, Rotorua

Summary

The Health Department, under the Food and Drugs Act 1969, is responsible to see that all food products, including honey, are handled, packed and displayed in a hygienic and honest manner.

The Food and Drugs Relations 1973 defines honey specifically as the "sugar product contained from the comb of the honey bee. Honey shall contain not less than 60 percent of reducing sugars calculated as anhydrous dextrose, and not more than 20 percent of water. Honey shall not yield more than 0.4 percent ash." Honey by definition is a pure product. If it departs from these tolerances, or additives made to it, it cannot be called "honey".

All food for sale must be labelled in a manner, style and position set down by the Food and Drugs Regulations. Every container of honey must contain the name "honey", the net weight, and the name and address of the manufacturer or seller of the article. This is the "principal display panel". With respect to the address, a telegraphic or code address or a Post Office box number is not sufficient; however, for a corporate body, the name of the town is sufficient.

Honey packers must pay particular attention to claims they may make or imply about honey. Any written or pictorial matter appearing on or attached to or supplied with honey that directly or indirectly contradicts, qualifies, or modifies the label requirements is an offence under the Food and Drug Regulations 1973.

Regarding the labelling size, the word "honey" appearing in the principal display panel must be prominent in height, visual emphasis, and position so as to be conspicuous by comparison with any other matter appearing on the principal display panel. In the case of a cylindrical container, the width of the principal display panel on the cylindrical surface is not to exceed one-third of the circumference.

Claims about the vitamin and mineral contents of honey cannot be made unless the statement specifies their proportions in honey.

The onus is on you to package and label your products in a correct manner. If you have any doubts or queries do not hesitate to discuss it with your local Health Department Officer.

*Mr Barber replaced the scheduled speaker, Mr O.T. Walsh, Senior Inspector of Health, Rotorua.

BEEKEEPERS TECHNICAL LIBRARY

Library books are available to Members of the National Beekeeper Association of N.Z. Catalogue and Rules sent on request. Inquiries to the Librarian, Mr Chris Dawson, P.O. Box 423, Timaru.

Paper Presented at 1974 Taupo Seminar

THE HOUSEWIFE'S ACTION AND REACTION TO THE HONEY PACK

By PETER DICKSON
Lecturer in Management Studies, University of Waikato, Hamilton

Introduction

Do apiarists and their packers need to concern themselves with the honey pack? Doesn't honey, even despite its packing, sell itself?

In the short term the answer is "yes" but a longer term answer can proceed on the following lines. Loyal consumers, suffering from poor packaging, become very unimpressed with the concern apiarists show towards their own product and the consumer! Politics and price-control create a need for pressure-groups, including apiarists, to trade on public sympathy — if not today, tomorrow. Frustrated consumers become publicly most unsympathetic. Of more general concern is the fact that honey is losing its past share of the housewife's grocery dollars.

However, the author considers the most important reason why honey packaging can stand improvement is because the pack must be seen as an extension of the product, not as an ever increasing irksome cost. Actual sales tests conducted for some of the largest and most knowledgeable marketing organisations in the United States have indicated that changes in illustrations or colours on packs can double, or halve, brand sales of convenience goods.1

Subtle visual or convenience differences in the pack can have not-at-all subtle sales effects.

Housewives are by now means strongly brand loyal when buying honey. About two-thirds of the housewives in this study attempted to name the brand of honey they had in the house. When this was checked less than half had correctly named the brand!

The upshot is that while consumers may have clear 'type' preferences (e.g. clover) they can be attracted away, from brand loyalty, by other features such as packaging and price. Packers and producers, angling for larger sales and market dominance or hedging against consumers' concern for value-for-money can consequently reap returns from improved packaging.

As the Spanish mark Baltasar Gracian said, more than 300 years before today's movie starlets or "honeys":

"To be of worth, and to know how to show it, is to be worth double."

Methodology of Study

The study involved interviewing 104 Hamilton housewives. There is no intention to present the findings as conclusive because of the small sample, but some of the opinions are expressed so strongly as to be ignored or disclaimed at the peril of the interested parties.

The subject's households were chosen randomly and the interviews, undertaken in July 1974, were conducted according to a strictly prescribed procedure and questionnaire. The interviewers were third year Marketing students studying at the School of Management Studies, University of Waikato. 2

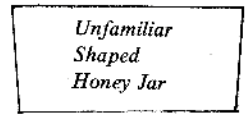
To aid in the understanding of the results the results are split into four main sections. Each section explains the importance of packaging factor and the pertinent findings. The four aspects can be summarised in the acronym VIEW: 3

Section 1 Visibility
Section 2 Information
Section 3 Emotionally appealing
Section 4 Workable.

The main points are summed up in the Conclusion.

Section 1 : Visibility

Visibility is a measure of how easily the pack can be found in its natural habitat, usually a mass display. Honey packed in an unfamiliar container will require a larger "HONEY" label to be seen or perceived as honey.



Section 2 : Information

An effective pack must quickly and clearly signal what it contains. What honey that is; the type of honey, brand of honey, colour of the honey, price of the pack and the weight.

The "type" is seen by many to mean the nectar or flowers used to produce the honey. The brand is associated with type but can also indicate the apiarist or the packer.

What do you look for on the container?

Item Mentioned	Frequency of Mention
The "type" of honey	49%
The brand of honey	40%
The Price	33%
The Weight	12%
No response	16%
	(totals more than 100% as some subjects mentioned two or more items)

Section 3 : Emotional appeal

Packages, like people, have definite personalities. Combinations of design elements such as shape, texture, colour, illustrations, materials used, all contribute to a total image — called the pack "Gestalt" — the pack seen as a whole. Colour and illustrations are first discussed as ingredients in this total pack impact.

Colour

The major colour of a pack lays the foundation for the total effect. An early writer has suggested the colour of the world "Honey" should complement the colour of the honey itself. The base colour of the container, he suggests, should be a reddish blue for light honey and a dark blue for amber honey. 4 This study indicated that blue was a least preferred colour.

Which of the following colours would you like you honey container to come in?

Colour description	First Choice
Stone white	20%
Canary yellow	20%
Pacific yellow	12%
Kelly green	12%
Hot orange	8%
Bright red	8%

It appears that the base colour of the honey pack should be bright and modern or related to honey colours.

Illustrations

Illustrations on honey packaging should obviously relate to the product or its use, i.e. bees, honeycombs, beehives, flowers (especially the nectar gathered by the bees for the brand in question), cartoons of children or bears eating honey.

Shaw hypothesised the following:

> "A bee, as an insect, — often is not appealing to the housewife. Modern marketing theory is to exclude bugs from food and to the uninformed a bee is a bug".

This author's own armchair analysis is that you would have to go a long way in New Zealand to find housewives or children over five calling a "bee" a "bug" or "insect". Surely almost all consumers are taught very early in life the following?

(a) Bees produce honey which is very kind of them.
(b) When they do in fact hurt us, it hurts them much more.
(c) Bees in fact loathe wasps and other bugs as much as we do.

For these reasons and because of its "honesty", "industry" and "committment" a bee is much more "human" (is seen to have human characteristics, or characteristics that humans are meant to have!) than the common "bug".

However, rather than rely on supposition, the consumer was consulted.

What ideas, objects or animals do you think most people/children/you would like to see illustrated on the honey container?

	Frequency of Mention		
Mentioned	**Most People**	**Children**	**Yourself**
Bees	56%	42%	46%
Bears	18%	28%	10%
Flowers — Ordinary	14%	5%	15%
Clover	4%		
		2%	10%
Other Animals	2%	10%	2%
Cartoons	1%	5%	1%

The conclusion that is tentatively drawn is to have bees, flowers or bears on packs in that order, for adults. For children it should be bees (perhaps a cartoon character), bears and other animals.

Overall Total Pack Impact

A test of the whole emotional impact of several 1 lb honey cardboard wax containers was conducted. From a collection of about 40 old and new containers, eleven different packs were chosen for testing. 5. These designs did not necessarily reflect the current choice to the Hamilton housewife. Some were strangers, some have been superceded.

The choices were made so as to provide a wide a range of different packs as possible. The subjects were asked to choose the pack they considered the most attractive and the pack they

considered the least attractive. This does not mean that the chosen packs are the most or least attractive in New Zealand — no doubt there are "better" and there are "worse" in the housewife's opinion.

Test Pack	Most Attractive	Test Pack	Least Attractive
H "Citrus Apiaries Honey	40%	A "Arataki Light Amber"	47%
G Fells "Honey"	18%	E "Creamy Clover"	19%
I "Pohutukawa Honey"	18%		
B "Honey Gold"	18%		

The expressed reasons for the above preferences were, in order of importance –

H "Citrus Apiaries Honey"	– attractiveness of natural flowers; colour scheme and design; distinctive, unusual; clearly indicates type. *
G "Fells Honey"	– colour scheme and design which has honey colours also symbolises flowing honey.
I "Pohutukawa Honey"	– distinctive, eyecatching, Pohutukawa flower; indicates type.
B "Honey Gold"	– distinctive; different; cartons; symbolises honey.

The expressed reasons for the above dislikes were, in order of importance –

A "Arataki Light Amber"	– dull, unimaginative; uninspiring, plain, no illustration, colour is garish; doesn't relate to honey, irrelevant; printing is ugly; colour and printing is loud.
E "Creamy Clover"	– dull, unimaginative; colour combination; somehow doesn't relate well to honey.

Section 4: Workable

In addition to protection the "workability" factor includes such packaging aspects as; ease of opening, utility of the container for secondary use (re-use), storability of the package in normal household use. The questions that have to be answered are:

1. In what units does the consumer prefer to buy?
2. Is the honey transferred to another container at home or on display?
3. What sort of container is preferred?
4. What sort of lid is preferred?

1. In What Units Does the Consumer Prefer to Buy?

A majority (53%) purchased 1 lb containers. Even more, (58%), thought they had purchased 1lb containers. A Wellington Pilot Study in 1973 indicated that 50% of that sample preferred the 1lb container.

*Author's note; Based on its "Citrus Honey" label and its background of citrus flowers, this pack design led housewives and interviewers alike to believe that it contained dominantly citrus-type honey. apparently this is not the case.

In What Units Does the Consumer Prefer to Buy?

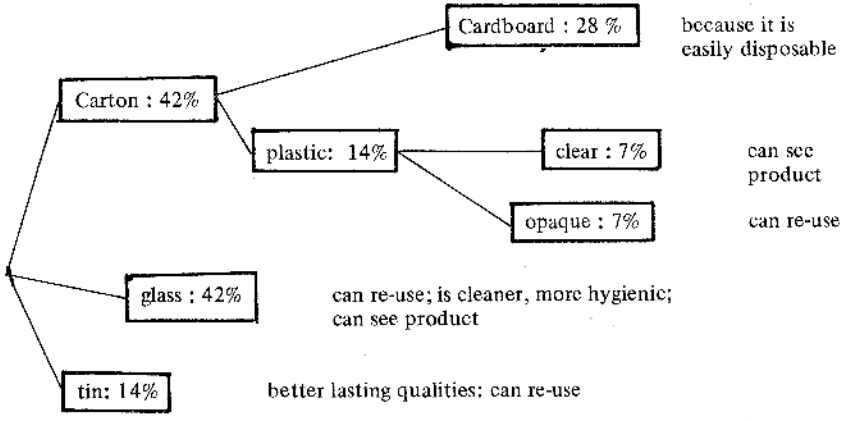
	Checked Size	Preferred Size
½ lb	22%	17%
1 lb	53%	51%
2 lb	6%	10%
3 lb	6%	5%
5 lb	11%	15%
5 lb	5%	2%

2. Is the Container on Display in the Home?

Although not directly investigated it seems that the increased casualness of meal preparation has increased the frequency of appearance of the honey pack on the dining table. A "yes" answer to this question places emphasis on the need for an attractive container which is clean and hygienic.

3. What Sort of Container is Preferred?

Frequency-of-Preference Diagram with major reasons:



4. What Sort of Lid is preferred:

Lid Preferred	Frequency of Response
Cardboard push-in Lid	5%
Plastic clip-on lid	92%
No response	3%

The average amount extra that **all** the housewives are prepared to pay is 1.5 cents. Just over 40% were prepared to pay 2 cents or more for the plastic lid — a significant market segment.

Conclusions

The greatest concern of housewives is obtaining a functional lid for the cardboard carton. A large majority are satisfied with the container but over one third of all housewives complained

about the problem of getting the cardboard lid back on the container, of the lid bending, tearing, breaking, and of the resultant unclean, unpresentable mess.

Their suggestion came across loud and clear. Without prompting, those that complained all suggested a strong plastic clip-on lid. Over 90% of all the housewives prefer such a lid and many are prepared to pay for its convenience. Perhaps the lid colour can complement the honey contents for easy "type" identification?

The 1 lb waxed cardboard carton is still very competitive with glass while there is a further distinct segment of consumers who prefer honey in larger quantities, in tins.

The type of honey must be clearly indicated by the packer — the retailer will clearly indicate the price. Some new approaches to the use of base colours and illustrations are suggested with some previous "expert" opinions being contested.

Pack comparisons across the wide range of alternatives indicated that housewives dislike dull, plain, unimaginative packs that "convey" no information. Distinctive, eyecatching designs or illustrations in bright sympathetic colours are considered most attractive.

The crunch question of course is, who pays for better packaging? Providing the above recommendations are supplied to the designer at the early planning stage, next time pack design is undertaken, improvement in the Visual, Information and Emotive factors should cost little extra. Plastic Clip-on lids (in the matching colour or plain white) will cost several cents extra. While many consumers are prepared to have the price passed on, and the price increase can be buried in inflationary "price increases", it is recommended that, initially, packers should carry the cost.

An Appendix to this paper on housewives' price sensitivity to 1 lb Honey packs (or units of 1 lb of Honey) suggest that a substantial number of housewives regard Honey as overpriced.*

If money is to be spent on improving packaging, it must be well spent.

Consumers are always prepared to pay a little more if they consequently get better-value-for-money. The "Right" improvements in packaging and presentation can provide this better-value-for-money.

Acknowledgement:

The following senior students studying Consumer Behaviour at the University of Waikato undertook the interviewing in the pilot study and made numerous helpful suggestions in the design of the questionnaire. They were: K.D. Bear, B.M. Copsey, S.P. Ellis, D. Fitzsimons, K.L. Hyde, G.W. McGlynn, S. McNamara, T.J. O'Boyle, D.C. Steward, R.J. Stringfield; K.C. Yeo.

*Full details of this Appendix are available from the author. In brief the majority of housewives paid less than 50 cents/lb for their last honey purchase. Most housewives were prepared to pay noless than 30-35 cents/lb nor more than 50-55 cents/lb for their honey.

REFERENCES

(1) "How much value can be Added Through Packaging"
D.W. Twedt Journal of Marketing vol. 32 January 1968
"A Cash Register Test of Sales Effectiveness"
Journal or Marketing Vol. 26 April 1962

(2) Further particulars on the design and results are available from:
Peter Dickson
Department of Management Studies
University of Waikato, Hamilton

(3) This acronym should be credited to Twedt. op cit.$

(4) Dr F.R. Shaw "Some Thoughts on Honey Labels and Containers"
American Bee Journal, 1952

(5) The collection of 40 containers was supplied by Mr G.M. Walton,
Apicultural Advisory Officer, Palmerston North.

New Zealand Honey Marketing Authority

NEWSLETTER TO SUPPLIERS

By RUSSELL F. POOLE
Chairman Honey Marketing Authority

The Authority met in Auckland on the 14th, 15th and 16th October, and the main topics discussed were:—

PAYOUT: The return on trading for the year showed a satisfactory result, and the Government's payout formula was applied to that result. The formula allowed for a minimum payout of 52 cents per kg. average over all honey graded, and a maximum of 55 cents per kg. average.

It is very pleasing to be able to report that the trading results allow for the maximum to be paid, that is 55 kg. average over all honey graded. At the same time as setting the average price, the Authority had to set the price for 100 point honey, and relate grade points to payout in order to accurately reflect market realisations. It was decided to "compress" the payout points so that the difference between the points shown on the grade certificate and 100 points are halved. To give a couple of examples, honey grading 96 points is 4 points less than 100, half this difference is 2 — therefore, 100 minus 2 equals 98. This means honey grading 96 points would be paid 98% of the 100 point layout. Honey grading 85 points is 15 points less than 100, half of 15 is 7.1/2, 100 minus 7.1/2 is 92.1/2, so honey grading 85 points would be paid 92.1/2% of the 100 point payout.

With this new payout schedule, and being required to average a payout of 55 cents per kg. the payout set for 100 point honey is 56.62 cents per kg. (= 25.68 cents per lb.) They payout is in addition to any early delivery or water white bonuses paid, but less the 40 cents per kg. advance payment already made.

HONEY INDUSTRY DEVELOPMENT LOANS: A number of applications were considered and eight loans totalling about $66,000 were approved. It was decided that no further applications would be considered this season.

CONDITIONS OF SUPPLY FOR 1975: The conditions were reviewed and some alterations made. The Dunedin depot will not be used this season, and honey previously sent there will go either to Pleasant Point or Invercargill, whichever is nearest to the supplier.

The freight allowance for distance carted of more than 80 km. (50 miles) is continued, as are the early delivery bonus and water white bonus, although the latter is reduced from 1.1/2 c per kg. to 1 c per kg.

An amount of 5 c per kg. will be withheld from the grading payment on strong kamahi and all flavours of thyme honey, as some difficulty is being experienced in marketing these at

satisfactory prices. With regard to the early delivery bonus, a further provision has been added that the 1 c per kg. will be paid for honey supplied in April and May, provided an equal amount was supplied prior to 31.3.75.

As honey is received, the store advance of 20 c per kg. will be credited to the supplier's account. On grading, the grading advance of a further 20 c per kg. will also be credited to the supplier's account. This will make a total advance of 40 c kg. flat, which is the same as last season, but will be subject to Treasury approval. Once a month each supplier will be sent a cheque for the balance to his credit at the end of the preceeding month. This will reduce the number of cheques issued by the Authority, but more important, should make it easier for you, the supplier, to identify which credits refer to which deliveries.

CONTAINERS: Due to difficulties with containers over the past few seasons, suppliers will now be charged for all containers when they obtain them, and this charge will be credited back when the full container is returned. This means that you are responsible for the containers you now have stored, together with any containers ordered from now on. In the event of any loss due to damage or loss in transit, you will be responsible to claim on the carrier or the New Zealand Railways. If you let another supplier have some of your containers, then get him to pay form them, as the Authority will have charged you for them, but will credit him when he fills and sends them in. The Authority will only transfer the container charge from one supplier to another if it has requested a supplier to make containers available to another supplier.

We feel sure that all producers will appreciate that the total amount of capital involved in the supply of containers is quite considerable, and the Authority wishes to use all monies for suppliers' benefits. It is for this reason we must be in firm control of the situation.

We would prefer any South Island supplier in need of containers to first approach our Branch managers at Hornby and Pleasant Point, who may be able to assist. We would also appreciate any supplier who finds he may have surplus stocks, to advise the nearest Branch manager as soon as possible.

PROPOSED HIVE LEVY: The National Beekeepers' Association's draft of this proposal was considered and returned to them with two or three suggested alterations.

H.M.A. PREMISES AND PLANT: Further steps were taken to continue the upgrading of the Authority's facilities to comply with the Health Department Regulations due to come into force in 1975. All honey producers would be advised to acquaint themselves with the requirements of these Regulations as they apply to honey houses, as it is understood that extracting premises will be as strictly inspected as packing premises.

STAFF: Mr. Arthur Smith is retiring from Head Office in November, and embarking on an extensive overseas holiday, after which he may come back in a part time capacity. Mr. Smith is well known to most North Island Suppliers, and to South Island suppliers, I would point out that Arthur is the person behind that well rounded copper plate handwriting you have seen on your advance payment and final payment dockets and cheques for many years. We are sorry to lose Arthur, but wish him a long a happy retirement.

AUTHORITY RETIREMENT: It is with deep regret that the Authority received notice from Mr. Eric Lee that this was his last meeting as Government Representative. Due to the work load he is carrying as Government Representative on some other Statutory Boards, the Minister of Agriculture has relieved him of the Honey Marketing Authority appointment, and replaced him with Mr. Don A. Hayman, a member of Mr. Lee's section in the Head Office of the Ministry of Agriculture & Fisheries. Authority members expressed their regret at the loss of Mr. Lee from the Authority, and spoke highly of the capable and conscientious manner in which he had applied himself to his duties over the years since his appointment in 1960. In his capacity as advisor to successive Ministers of Agriculture over the past 14 years, he has fairly and honestly presented beekeepers' points of view. To sum up Eric's service to the Industry, I can do no better than to repeat the remark I have heard a number of prominent beekeepers closely connected with both the H.M.A. and N.B.A. affairs make — "Eric Lee is the best friend the beekeeping industry has ever had".

Reports from round the Country indicate that a good season is in the offing. We hope that the foreboding economic conditions do not prove to be as bad as some pessimists are predicting, and the Authority will be endeavouring to improve on the 56.62 c payout in the coming season.

BEES OF THE WORLD

By B. J. Donovan, Entomologist, DSIR

PART IV: HONEY BEES IN NEW ZEALAND

Honey bees are called scientifically *Apis mellifera* or *Apis mellifica* (there is some disagreement as to which name is correct). The species was found naturally throughout Europe, the Middle East, parts of Asia and Africa. With the expansion of Europeans to new areas of the globe, the honey bee was taken along also, and this species is now found in most parts of the world.

Three other species of bee in the genus *Apis* are found in Asia. *Apis dorsata* or *zonata,* the giant honey bee, is found in India and South-east Asia, where it builds a single giant exposed comb from tree limbs, cliffs and the edges of buildings. *Apis florea,* the little honey bee, is also found in and around India, and it too builds a single exposed comb, usually in a shrub or sometimes under the eaves of buildings. The last species, *Apis indica,* is found in India, China,

Beekeepers know that honey bees in New Zealand vary greatly in colour, temperament, pollen and nectar gathering abilities, tendency to propolise etc. and often all or many of these characteristics can be found among hives in a single apiary. In the old world range of honey bee, for millions of years honey bees of one area evolved almost in isolation from bees of other areas. Bees were separated by oceans and lakes, mountain ranges, deserts etc, and in each area bees evolved characteristics which best suited them to survive in those areas.

Because the bees of all these areas can interbreed when given the chance (and they would have to be able to do so to be classified as one species) they must have evolved from one population that presumably was more homogeneous in its characteristics than it is now. If it were not for the advent of man and the resultant movement of bees from one geographical area to another, one may imagine that the process of evolution among the isolated groups of bes would have eventually lead to the evolution of new species of bees — i.e. bee populations that could not interbreed with one another if placed in the same area.

Most geographical areas of the old world had their own race or strain of honey bee which could be distinguished by various characteristics from other races of bees. The degree of differentiation from one area to another varied greatly, however, and although it is very easy to distinguish, for example, yellow Italian bees from black or brown north European bees, it is more difficult to distinguish black or brown Dutch bees from black or brown German bees.

The process of giving names to bees of an area can go on indefinitely until almost each valley or town could have its own strain or race of bee, but be that as it may there is no doubt that on the whole honey bees can be divided into about a dozen different races. Generally the bees of northern Europe were black or brown, and those of southern Europe and the middle east yellow or golden. It was from this varied assemblage of types of bees that the honey bees of New Zealand originated.

Mr. I. Hopkins, in *Practical Beekeeping* gives an account of the introduction of honey bees to New Zealand. The first bees were brought to Mangunga, Hokianga from England, by Miss Bumby, a sister of one of the early missionaries, and were landed there on 13 March 1839. Other bees were brought from England and New South Wales (where they had been introduced from England in April 1822) in 1842. The first Italian bees were landed in Auckland from California, to the order of Mr J.H. Harrison, then of Coromandel, the Canterbury Acclimatisation Society, and to Mr i. Hopkins, in 1880. Beginning in 1882 Mr Hopkins imported Italians (direct from Italy), Swiss Alpine, Syrians, Holylanders, Cyprians, and Carniolan bees, also from their respective countries, which he succeeded in establishing.

Importations of bees probably occurred spasmodically until the enactment of the Apiaries Act, 1924, which prevented the importation of bees without a permit. It is remoured among beekeepers however, that honey bees have been imported illegally in recent years.

It is evident, therefore, that the honey bees of New Zealand have originated from many different areas in the Old World range of the species. Honey bees have established in the wild in most areas of New Zealand from escaped swarms, and hives are found in hollow trees, occasionally exposed under limbs of trees or under bridges, and in rock cavities in cliffs or hillsides. Walls and roofs of houses are frequent hive sites. Some hives may be occupied for long periods. At Piriaka in the King Country, Mr Piwa Tanoa told me that when he was a boy in about 1910 a hive was present in a cliff cavity then, and now in 1974 bees are still there.

Honey bees in New Zealand in cultivated areas obtain most of their pollen and nectar requirements from introduced plants, but in native bush areas the stores are obtained mostly from native flowers. Pollen and nectar of all native flowers from which honey bees gather food except the kowhai seems to satisfy their nutritional requirements, and there can be no doubt that at times they must actively reduce, by their foraging activities, food available to native bees. As native bees are however mostly about only when food sources are ample, they are probably little affected by honey bee foraging activity. There is no evidence that honey, bumble and native bees ever fight over flower food sources, and indeed in the field these bees ignore each other.

Although introduced to New Zealand in man-made hives, honey bees have been established in almost all areas of the country in their own hives for 100 years or more, so they must now be considered to be a normal part of the insect life of the country.

In another sense however, honey bees are most unusual insects compared to almost all other insects in the country in that they are perhaps the most dangerous animal species to humans present in New Zealand. Apart from honey bees, few other animals cause harm to humans by direct physical or toxic means. Katipo spiders occasionally bite humans and severe sickness may result. These cases are usually given prominence in newspapers.

Incidences of people or animals being stung by German wasps are sometimes reported, and bumble bees may also sting people and cause physical distress.

Honey bees however can and do cause severe illness and sometimes death in humans and other animals such as horses and dogs.

Statistics supplied by the Department of Health for human deaths from bee stings from 1955 to 1968 are as follows:

1956	1	female aged 10 years
	1	male aged 58 years
1962	1	male aged 68 years
1968	1	male aged 58 years
	1	male aged 54 years
	5	

Details of cases of illness caused by bee stings and treated as inpatients in Public Hospitals are available from 1958 to 1968.

1958	13	1964	23
1959	19	1965	16
1960	22	1966	20
1961	16	1967	36
1972	32	1968	47
1963	24		
			268

Many more cases involving discomfiture due to pain and swelling but not severe enough to warrant hospitalisation must occur.

There is no doubt then that honey bees can be very dangerous to humans. Beekeepers should take care to minimise the likelihood of stings for visitors to their apiaries, and should familiarise themselves with first aid measures for victims of stings.

Honey, pollen, brood and the bees themselves constitute a rich potential source of high quality food for a large number of animals, chiefly many mammals and insects. Without the deterrent of painful stings it would be very difficult if not impossible for honey bees to maintain the integrity of their hives. It is because bees possess the ability to defend their hives that beekeepers are able to maintain apiaries in remote areas with the knowledge that very little disturbance is likely to occur. The ability of beekeepers to harvest honey depends upon their skill in handling bees in such a manner that they suffer minimum numbers of stings and the ability of the beehives to recover quickly from disturbance.

Beekeepers have selectively removed from their apiaries the most vicious and unmanagable bees ever since man began to keep bees, and this process has accellerated in the last half century or so with the growth in knowledge of the bees genetic and breeding systems. Bees kept in hives today have therefore been somewhat selected to 'fit in' with the beekeepers, and as beekeeping practices are often handed down from father to son, perhaps bees exert some selective effect on beekeepers! Certainly people who are very allergic to bee stings are excluded from handling bees.

If due care is exercised in human-bee contact, there is no reason why bees should be regarded with any more concern than other stinging insects such as wasps and bumble bees. One cannot really measure the value to the economy of produce from pollination, honey production, wax and pollen, against distress to humans caused by stings, but there can be no doubt that honey bees are extremely valuable insects and even essential for the maintenance of our agriculturally based economy..

TRAINING COURSE FOR QUEEN BEE PRODUCERS

The New Zealand Ministry of Agriculture and Fisheries has organised a short course for beekeepers to be held at the Ministry's training farm at Flock House, near Bulls, from 20-24 January 1975. Although many agricultural groups have held training courses at Flock House in recent years this is the first occasion that the beekeeping industry will have used the facilities.

The overall objective of the course is to improve New Zealand's queen bee production. Through practical involvement the group will examine and discuss queen and drone anatomy, behaviour and physiology, selecting breeder colonies, queen rearing and breeding methods, grafting programmes, marketing and economics. The course will be limited to 16 people. Although more than this number have already indicated their willingness to attend, those that wish to participate in a course of this type should contact:

G.M. Reid, M.A.F., Private Bag, Christchurch
or G.M. Walton, M.A.F., Private Bag, Palmerston North

GORE SEMINAR 1974

By R. MINCHIN Rural Bank, Invercargill

Paper Presented at 1974 Gore Seminar

RURAL BANKING AND FINANCE CORPORATION

TO START WITH I will give you some background to the Rural Banking and Finance Corporation.

The Government has been involved in lending to farmers under various Acts and names since 1894 when the Government Advances to Settlers Act was passed. In the year 1895, 796 loans of an average value of $762 were made — mainly for refinance.

Lending went through various phases with the emphasis changing depending on economic conditions and Government policy. From about 1945 to 1960, the State Advances Corporation was mainly engaged in the settlement of Rehabilitation farmers.

At 31st March 1974, the State Advances Corporation as a whole administered net assets of $1,168 million. Included in this amount was $386 million lent to 21,813 farmers or approximately one in three of all economic farms in the country. As well as its farm lending, the State Advances Corporation lend on housing, in the tourist industry, to kindergartens, schools, fisheries, gas companies, milk treatment stations, doctors group practices as well as administering the 53,000 State houses in the country.

Last year $217 million went lent by the State Advances Corporation; of this

$63 million was borrowed from the National Development Loan Account;

$124 million came from loan repayments;

$30 million from other sources including profit and reserves.

The Rural Bank, which took over the rural activities of the State Advances Corporation last April, is controlled by a board of five Directors including two Federated Farmers nominees. This Board is responsible to the Government for the implementation of the Government's farm lending policies. In the limited time since taking over from the State Advances Corportion, the new board has made changes in policy and emphasis including loan limits and will continue to consider and implement policies to the best interests of the primary industry.

Last year the State Advances Corporation granted 3,504 loans to farmers totalling $59 million. For this year, the Rural Bank has $78 million to lend.

Of this allocation of funds, $40 million is reserved for the settlement of young farmers; at an average of just over $50,000, this would settle some 750 farmers.

$5 million is available for purchase of additional land to bring existing units up to an economic size.

$7 million is available for refinance and the balance is for Stock Loans, Climatic Relief, Rural Industrial Loans and Development.

In formulating the lending policies of the Rural Bank, it must be remembered that the total amount of money available is limited, the Rural Bank must compete with all other demands made on the Government for finance.

For this reason, our policies are aimed at using the available funds as widely and equitably as possible. This is achieved by applying criteria as to who is eligible to borrow for various purposes and by the fixing of certain limits on the amount borrowed and by the use of different interest rates depending on the purpose for which the finance is to be used in relation to its benefit to the nation as a whole.

GENERAL LOAN DETAILS

Application Fees

These are scaled according to the amount applied for and are intended to cover the direct costs of loan inspection and administration.

The current scale is:

(a) New Loan —
$20 up to $4,000 plus $3 for each additional $2,000;

(b) Further Advances or Stock Loans —
$10 up to $2,000 plus $3 for each additional $2,000 or part thereof.

General Reserve Fund

Under Section 26 of the Rural Banking and Finance Corporation Act, every person who receives a loan may be required to pay to the Reserve Fund a sum to be fixed from time to time but not exceeding 2% of the amount of the loan — in practice 2% is charged and added to the loan.

Interest Rates

Rates are charged according to purpose and security available from 5½%-8% and are reviewable every three years.

Long Terms

Rural Banking and Finance Corporation loans are put on to a table basis with quarterly repayments. The loan term may be for 5-25 years depending on ability to repay but loans to beekeepers tend to have been for shorter terms, say 10 years or 15 years

because the amounts have been smaller and, in some cases, security less satisfactory.

Quicker repayments ahead of the normal quarterly repayments will be accepted and loan terms adjusted accordingly.

Loan Limits

In 1961, with Rehab. leading nearing completion, the settlement of young farmers became a main aim of policy. Loan limits were set at:

Dairy Farms	$20,000
Sheep Farms	$28,000
Beekeepers,	$10,000
Market Gardeners etc.	5% Interest rate

1974 — Loan limits were made flexible with an average loan level and scope to increase this in case of special merit.

	Average Level of Loan
Sheep Farms	$65,000
Dairy Farms	$45,000
Pigs, Poultry, Bees etc.	No average

Loans for these classes of farming have been set with the aim of encouraging diversification of production and more intensive use of land. Clearly many of these smaller propositions will not require more than $25,000. However, a flexible approach is adopted in those cases where something more than $40,000 is clearly warranted to achieve sound establishment.

New Purchase Loans

Normal policy for farm loans (within the limit of available funds) is to settle efficient creditworthy young farmers on economic units or properties that can be developed into economic units within 3/4 years of settlement.

The applicant should

(a) have adequate experience and preferably have been actively engaged in the industry for at least three years prior to the application;
(b) be a New Zealand or British subject;
(c) not have previously owned an economic unit;
(d) propose to purchase a property where there is scope for worthwhile increased production, particularly by a young farmer;
(e) genuinely need assistance, i.e. those with substantial assets should not need Corporation assistance.

Applicant's Contribution

His personal contribution towards the purchase should be as high as possible; priority would be given to applicants who have shown ability to save.

He must show he can arrange sufficient finance to cover the total ingoing cost and state clearly the terms of any other borrowing.

Loans for Beekeepers

Applications will be considered on merit for both development and purchase.

Assistant is likely to be limited to those already established to enable them to expand and reorganise under normal development policy.

Loans would normally be limited to from half to two thirds of the Corporation's value of Land and Buildings. Hives constitute a significant part of the enterprise but because of mobility, disease etc. they have limitations for security purposes but can be taken for additional margin. Assistant to purchase hives may be granted where there is adequate security in the land.

Proven ability and some sound evidence of profitability are essential for applications to be successful.

Loans for Buildings — Honey Houses, Dwellings etc.

These can be considered under normal development lending. Reports will include an assessment of the value of the buildings to be erected.

Loans for dwellings are normally limited to $11,000 for houses costing $27,000 or less with interest at normal development rates — usual term is 25 years. In cases of special merit, e.g. if dwelling includes room for single labour, this $11,000 can be exceeded. The Rural Bank does not lend on luxury class homes.

Loans for Climatic Relief

I have been asked to comment on these loans.

The corporation, as part of its normal rural lending activities, provides special financial assistance to farmers, beekeepers etc. in defined climatic relief areas. To qualify, the area must be declared a "climatic relief area" by the Minister of Agriculture after recommendation of Committees and approval of Cabinet. Applications are treated sympathetically where difficulties arise because of exceptional climatic conditions and where assistance is seen as necessary to the rehabilitation of the farmer.

Purpose of Climatic Relief Loans

These loans can be used to meet all forms of farm expenditure including normal maintenance, purchase of feed including sugar in the case of beekeepers, cartage, living expenses, replacement of stock etc. Refinance will also be considered to repay hard core or other outstanding debts if essential to assist in the farmers' rehabilitation.

Fees and Reserve Fund Contribution

No application fees are payable for these loans but the normal General Reserve Fund contribution is to be paid on all advances.

Interest Rate and Security

Interest rate is 5½%, non-reviewable, irrespective of the ranking of the security available. A flexible approach is taken to security margins mortgage ranking etc.

For the first two years of a loan, interest only would usually be paid and then the loan would be put on a permanent repayment term. Repayment term will depend on ability to repay.

In some cases of severe hardship, a suspensory loan factor, including interest deferment, can be included in relief measures.

In case of a suspensory loan, interest for two years up to $500 is suspended and written off after five years.

The Mortgage Guarantee Scheme

This scheme was recently introduced in an endeavour to attract more money into the farming sector. Where the Corporation guarantees a mortgage, it guarantees that the lender will not lose any money.

A guarantee against loss of capital and, as an option, prompt payment of charges can be issued to a lender to the extent of 80% of the value of land offered as security with a maximum of $150,000 being guaranteed. The guaranteed loan may be first, second or subsequent mortgage provided the guaranteed mortgage and any prior mortgages represent no more than the maximum f 80% of the land or $150,000.

It is expected that the borrower will have an equity of not less than 30%, the mortgage must be for not less than five years and the interest rate must be reasonable.

A single fee is payable for this guarantee, the amount being related to the amount and security margin of the guaranteed mortgage, e.g. a first mortgage of 60% of the value = ¼ percent, 80% of value = 1¼ percent.

Additional fees are payable where the mortgage is other than first or where a guarantee of prompt payment of mortgage instalments is required, the maximum fee payable being 2% for second mortgage up to 80% and including a guarantee of prompt payment of mortgage instalments.

LOAN PROCEDURES

How do you apply for a Loan?

An application form has to be filled in giving details of applicant's assets and liabilities, details of security available, the legal description of the land and details of how a proposition is to be financed. In the case of an existing operator, three years Annual Accounts and Balance Sheets should accompany the application. It is normal for a solicitor to assist with filing in the application but this is not essential.

After the application is received, the applicant will be visited by a farm appraiser who will inspect the property to make a valuation and will discuss fully the financial details of the proposition including ability to service the loan charges. He will then write a report and recommendation to the District Appraiser. After the District Appraiser comments on the report, it is sent to the Mortgage Loans Committee in Wellington who decide if a loan will be given, how much of a loan and on what terms.

It normally takes about three to four weeks after the farm appraiser's inspection before a decision is received. The applicant is then informed of the decision in writing.

Where a loan is offered the Corporation's Solicitor then issues instructions for applicant's Solicitor who prepares the security documents. After the solicitor's certificate is received, the loan money can be paid out. Loan moneys are paid out to the applicant's solicitor who settled for land purchased or pays for materials etc.

Summary

The Rural Banking and Finance Corporation is the largest single source of farm mortgage finance in New Zealand. Policies are continually being changed to keep up with needs of primary industry and the availability of finance. Funds are not unlimited and the directors must try and allocate them to where need is greatest. If you have any special problems where the Rural Bank could help, your nearest office will be pleased to discuss the problem with you.

Paper Presented at 1974 Gore Seminar

ESTATE PLANNING TODAY

By ALAN E. FALCONER AMP Society, Gore

What is Estate Duty?

IN BROAD TERMS, estate duty is a tax on the total value of property that was owned by a person who has died or that passes from one person to another because of his death.

Estate duty is payable on the final balance of the estate of every person, and is assessed at the rate set out in the First Schedule to the Act. The final balance is the total value of the dutiable estate less the allowable debts.

The rates of estate duty at present, range from 7% to 40% of the final balance of the estate over and above the $12,000 exemption; the maximum rate being reached at $150,000.

Main Exemptions:

(i) There is a general exemption from duty for estates up to the value of $12,000. This means that any estate of less than $12,000 will incur no duty.

(ii) The widows/widowers exemption has been increased in the budget from $40,000 to $60,000.

(iii) Infant Children if beneficially interested in a parent's estate may receive relief of $1,000 or the value of the benefit whichever is the lesser.

(iv) The first $4,000 of personal chattels which are dutiable as part of the deceased's actual estate or as joint property are excluded from the dutiable estate.

(v) There are special provisions relating to Charitable Successions, Joint Family Homes, Gift Duty where death of the donor occurs within three years of making the gift, and Quick Successions where the death of a beneficiary occurs within five years of succeeding to property which has been assessed for Estate Duty.

Estate Duty is a voluntary tax. If you have no estate you pay no Estate Duty, and in fact if you have a small estate you may also be deprived of the privilege of paying Estate Duty.

Estate Duty is voluntary in the sense that it is quite proper to take steps to reduce one's estate so that little or no duty is payable.

Ayshire Pillman Motor Services, Precedent

Lord Clyde stated in 1929 that "No man in this country is under the smallest obligation moral or other, so to arrange his legal relations to his business or his property as to enable the Inland Revenue to put the largest possible shovel into his stores. The Inland Revenue is not slow — and quite rightly — to take every advantage which is open to it under the taxing statutes for the purpose of depleting the taxpayers pocket. And the taxpayer, is, in like manner, entitled to be astute to prevent, as far as he honestly can, the depletion of his means by the Revenue."

Estate Planning

Estate Planning could perhaps be defined as "Arranging a person's assets in order to preserve their maximum value and income; having regard to the best interests of that person, and the eventual recipients of these assets."

Estate planning need not be complicated; and the simple, obvious things shouldn't be overlooked, let common sense prevail.

The following pointers may benefit even a modest estate:-

A. 1. Joint Bank Account (Husband and Wife). This gives the survivor uninterrupted access to cash when either dies. If the amount becomes substantial, questions of gifting may be raised by the Commissioner if one party has contributed more than the other.

2. Joint Family Home. Now completely duty-free in the first estate, but there is no exemption when the survivor dies.

3. Mortgage Repayment Insurance. The premium is relatively low, since the cover reduces with the mortgage.

4. Assignment of Life Assurance. Policies are transferred at surrender value which is frequently only a fraction of their maturity value, and can effectively reduce an estate.

B. For the larger estates more severe action may be required, involving the disposition of **Growth Assets** which

would include:

a. Life Policies.
b. Land (Especially if undeveloped).
c. Livestock.
d. Equity Shares in sound companies.
e. Remainderman's vested interest in an Estate.

The method adopted is usually to sell the asset to the recipient, with all or part of the purchase price left owing as an "on demand" debt.

This method secures to the vendor indirect control over the asset, as it would probably revert to him if he called up the debt. It also leaves open the rate of interest (if any), as the absence of a stated term means that its inadequacy relative to current term rates of interest cannot be calculated for tax purposes.

If the donor requires cash, he can either charge interest or take repayment by instalments — which would be tax-free to him, but of course conversely not deductible by the purchaser — living on Capital.

Usually, however, he will reduce the debt by annual gifts — which are exempt from gift duty up to $4,000 p.a. Whether that rate of gifting is sufficient will depend on:

1. The age of the donor
2. The amount involved
3. The need (if any) for later estate reduction.

The above achieves

(i) the transfer of the future growth in value, out of the estate.
(ii) The reduction of the estate, to the extent of the amount gifted, off the sale price.
(iii) The reduction of taxable income, if the asset concerned is earning.

C. Care should be taken when divesting assets to ensure that adequate safeguards do exist to cover other possible eventualities. The following are given by way of illustration; what would the donor wish to happen if:-

1. His marriage broke-up?
2. It would found the widow could not manage the finances or the assets
3. The widow remarries after widowhood.

D. **Trusts:**

Trusts are usually more appropriate where

(a) The direct transfer of assets is not possible (e.g. if the estate needs reducing, but the family is still very young.)
(b) The recipients are unable to control the assets (e.g. handicapped or irresponsible).
(c) It is desired to defer vesting — if one's family is inheriting from other sources, it is sometimes desirable to take the "spreading" process down to grandchildren to avoid passing the estate planning problem to the next generation.

Wills and Trusts

1. The aim should be to enable the trustee to do with the estate or trust assets what the owner would have done had he lived, or retained them, as the case may be.

2. This necessitates flexibility in the terms of investment, administration and distribution. Such flexibility is one of the greatest needs when Estate Planning in Inflationary Times.

Some instances will illustrate this —

(a) Income for life (or widowhood) is not always the best arrangement. It avoids the husband's assets being caught for estate duty a second time in his wife's estate. It also aggregates both income in the hands of the survivor, thus reversing the tax advantages gained if he had set her up with income-producing assets during his lifetime.

(b) An alternative is to provide for discretionary allocation of the income by the trustees, among the wife and family. Whatever is paid or applied for the family will be taxed as their individual income, and the proviso is usually made that the wife takes the whole income if no allocation is made.

(c) It is sometimes argued that this kind of arrangement puts the dependents "in the hands of the trustees". This can be resolved in many cases by making the wife one of those trustees.

(d) Similar flexibility can be achieved by giving the trustees (or the wife if she is not one) a **special "power of appointment"** whereby the proportionate share of each family member in the estate or trust capital is not rigidly set when the father dies, or sets up his trust as the case may be. For instance, a relatively young business proprietor may need to divert his capital from his wife's estate, but his death while his family are young poses two problems:

(i) equal division among several children would fragment the business.

(ii) it is too early to know which member(s) of the family — if any — will succeed him in it. The solution may be to leave the proportionate shares open, with the proviso that all will share equally if the power of appointment is not exercised.

(e) Full and **adequate powers** are essential in the Will or Deed governing any continuing Trust. Such powers should include the power to —

(i) raise finance by borrowing
(2) make advances with or without security for interest at market rates.
(3) buy land
(4) invest in private company shares, or most company shares.
(5) conduct a business solely, or as a partner.

The above are not fully available to trustees by law. They are often necessary in Trusts, and important in Wills. "It is better to have and not need them than to need and not have them."

To justify the above, think of the changes in the last ten years in money values, investment preferences and financing patterns — to say nothing of costs, whether of maintaining a family or a business. Many an estate or trust will run for much longer than the next ten years, and the trustees should be able to adjust their policies to changes in family needs, investment or business opportunities.

Section 108 of the Land and Income Tax Act has been used by the Commissioner to attack several ingenious estate planning schemes — usually with some degree of success, however its **proposed replacement** by Section 8 of the L & T Amendment Act (N.2) 1974 will bring no joy to some — particularly as it confers powers on the Commissioner in respect of "every contract, agreement, or arrangement made or entered into, whether before or after the commencement of this Act."

At first sight it would appear to sound the death knell for Estate Planning.

However, an Inland Revenue Department statement says:

"If a person wishes to make over permanently a permanent asset such as land or shares in a company outright to members of his family or family trust, this transaction will not of itself be caught under the new Section."

"If, on the other hand, what is done is to retain ownership or control of the "income producing substance" as, for instance, if part of a business . . . is given on a temporary basis to a member of the family or family trust . . . or short term assets are made over and leased back etc, this would be regarded as caught within the Section."

The type of arrangement outlined earlier is as far as cautious estate planners have usually been prepared to go. Their caution is vindicated by such schemes being still valid under the new Section — or at least the Department's present interpretation of it.

The section is aimed at schemes for avoiding income tax, and deals effectively with such former "grey areas" as trusts set up for the leasing of land or contracing machinery, without the actual outright transfer of the assets concerned.

Where tax avoidance is a "purely incidental feature" of the arrangement, there appears still to be no barrier to effective estate reduction plans. The corollary — Gift with-out tags.

Insurance: To my mind Life Insurance is the greatest weapon in the Estate Planning armoury. Take for instance:

1. The creation of a significant estate requires nothing more or less than good health, a piece of paper, a drop of ink, and the necessary "where-with-all" to pay the premiums.
2. In some situations this approach can resolve the problems of treating members of a family equitably, where a major asset is indivisible.
3. Life Insurance can provide protection for major assets by covering the mortgage with Mortgage Repayment Insurance — the premiums are insignificant compared with the amount of cover obtained.
4. In circumstances where divesting is required, Life Insurance Policies can be transferred at their Surrender Value which is usually much less than the maturity value, in the event of death.
5. Where a vested interest exists it is possible to have a considerable notional estate for calculating estate duty, but no immediate access to funds for paying the duty. Life Insurance can give the

Continued on Page 59

Paper Presented at 1974 Gore Seminar

PROFITABLE BEEKEEPING

By BRIAN MILNES Apiary Instructor, Auckland

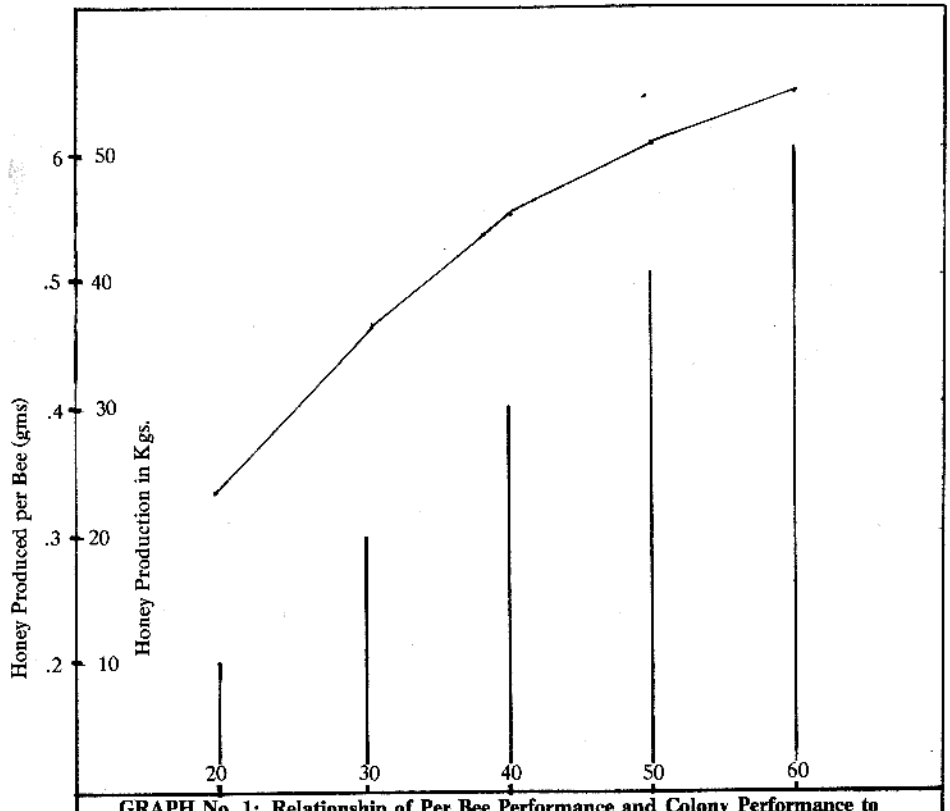
PROFITABLE beekeeping is the art of keeping bees for the maximum gain per dollar and labour input. Many beekeepers define profit as depreciation with no taxation. If you are paying taxes you must first make a profit. The more tax the more profit.

We don't like taxes but if we are to live in a welfare society then we have to expect some penalties.

I define profitable beekeeping as being beneficial to the beekeeper, his family and the nation. Ask yourselves are you beekeeping for enjoyment and money or headaches and bankruptcy?

The yield per hive is the most important factor influencing the cost of production. To run more hives to gain additional profit without taking into consideration the extra management needed is folly.

Profitable beekeeping requires that all colonies be managed to produce and maintain maximum populations for the honey flow. The amount of honey a colony will produce is determined by the population of adult bees and the rate of production per individual bee.

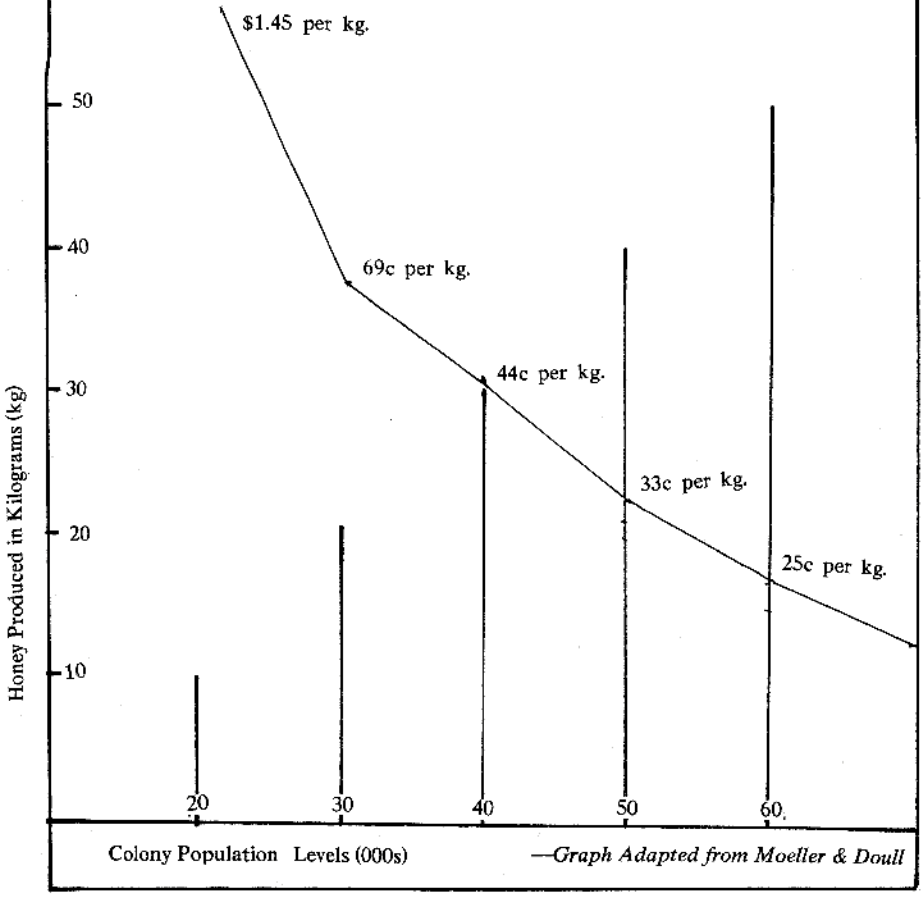


GRAPH No. 1: Relationship of Per Bee Performance and Colony Performance to Population Levels. *Adapted from Moeller & Doull*

The honey flow can be termed as your income. To build up colonies in the flow is loss of income. Preparations need to commence at least nine weeks before the flow starts. An egg laid on any given day becomes a foraging bee 6-9 weeks later. Work done in this period will therefore reflect in the colony surplus.

A simple graph will show that it costs six times more to produce a kilogram of honey in a low yieling colony compared to a high yielding colony.

GRAPH No. 2: Cost per Kilogram of Honey produced at say $10 per hive running costs



—Graph Adapted from Moeller & Doull

Being able to gauge a colony's true population at the commencement of the build up period is extremely important. Knowing the strength of a colony tells you what preparations are necessary to have the colony at full strength for the flow.

Visual counts can be accurate to within 2-3000 bees. A full depth frame well covered on both sides carries approximately 3500 bees. If half the comb is exposed there are approximately 1700 bees and so on.

Brood measurements give the most accurate counts. A queen laying 1500 eggs per day would produce 750 square inch brood and maintain a colony strength of 40,000 bees. At a rate of 2000 eggs per day, 1000 square inches of brood, or seven full frames would maintain a colony strength in excess of

50,000 bees.

Knowledge of the amount of brood in a colony will also indicate queen performance. It can be seen that this need not be a time consuming job or need the help of a slide rule.

Adequate food supplies are the most important for good queen performance — for that matter the performance of the colony as a whole.

If a queen is not laying to capacity this is the first thing to look for. The age of the queen is also important. A colony with a first year queen properly mated will produce a greater work force and more honey than a colony with a second year queen.

Ideally requeening should be done every year. Not only is more honey produced but less time and labour is involved in getting colonies to maximum production. Trials by Forster in 1966-1969 also showed that the incidence of swarming was significantly reduced using one year queens.

Requeening every year is not always possible. Queen bees are in demand and breeders are unable to supply all that are required. Failing queens must take priority over queens that are performing adequately.

Feeding honey or sugar syrup to stimulate breeding is a must here in Southland, as well as in many other parts of the country. Too often bees are starving in late October/November just when they should be boosted. Pollen or pollen substitutes should also be fed to compensate for the lack of natural pollens and the climatic conditions of Southland.

More than one beekeeper in Southland last season would have lost upwards of 30% of his crop by having his bees build up on the flow. It was fortunate that for the area, I believe, the flow was a long one or more would have been lost.

You can't scrimp on one hand and expect to rake in the dollars with the other.

On commencement of the flow it is just as important to unite weak colonies; those that will produce a small surplus, and build up on a honey flow. Figures from the earlier graph show that one strong colony will out produce two weak colonies.

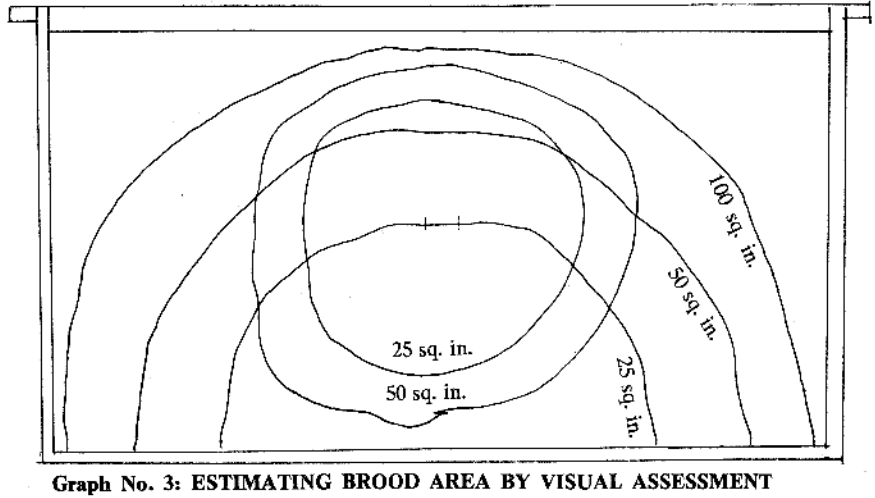
This will also eliminate the additional cost of carrying a surplus unit.

To start the honey flow with 600 strong colonies is better than 500 strong colonies and 200 not so strong. Equipment is also better utilised.

Summary: for better, bigger crops.

Requeen regularly — preferably every year. Learn to anticipate the colony's requirements with accurate bee strength counts. Don't scrimp on feed requirements. Unite weak colonies, be ruthless, don't let them use your income.

Apiary locations, sizes and spacing are responsible for most of the increased running costs. With petrol and diesel costs at an all time high, wages for good labour ever



Graph No. 3: ESTIMATING BROOD AREA BY VISUAL ASSESSMENT
[7 Full Depth Frames = 6452 sq. cm. [1000 sq. in.] or a Queen laying 2000 eggs per day]

increasing more productive use must be made of these items. You just cannot afford to have labour sitting in a truck for two hours a day between yards.

This winter I have spent some time plotting apiery locations on maps. It would appear that some districts are adequately covered while others are not. Registrations show that the average apiary size is 15 colonies. This could be increased in most areas to 25 colonies with no loss of production.

If this were carried out beekeepers could increase hive numbers within existing apiaries with no additional mileage, and less time spent sitting in trucks each day.

One of the greatest assets any beekeeper can have is a good labour unit. Throughout the entire industry there is a need to obtain and retain good labour. Whether you like it or not you cannot expect to pay a married man less than $5000 per year when freezing works offer over $6000 for less hours worked in only 10 months of the year. Too many conscientious skilled beekeepers have been lost to the industry through lack of understanding and money on behalf of their employers.

Too often skilled labour is left doing unskilled work and extracting. Good men need to be encouraged, given responsibility, and paid according to their skills. These are the men who, like yourselves, take on a rewarding and enjoyable job of work; they are the future generation and must not be lost.

It is the prudent and successful beekeeper who pays more for one skilled unit than a minimum for two unskilled units.

Plant and Extracting

Plant need not be expensive, it should be simple and able to run under the management of unskilled labour. This is particularly true for the one man beekeeper. More use should be made of co-op type plants leaving the skilled beekeepers to keep bees. The bees after all turn your labour into profit. Not the extracting plant.

Last and by no means least. Budgeting management and planning. Budgeting, knowing where the next dollar is coming from, where it can be spent, why the profit was not so big last year when you had a bumper season. Where you can save money and where you should be spending it. Each set of books tells a story.

Too many beekeepers leave the financial side of the business in the hands of an accountant.

Don't become a figure in the yearly drafts sent for your signature. Be involved, become aware. Don't bungle your way through each year waiting the bank manager's call to put you on the straight and narrow.

Sitting down each month to evaluate your prospect and planning your next move on the work programme, is time well spent. Involve your man if you employ labour. He may have noticed something that you have missed. To him, to be involved means to belong.

Finally

Anticipating a colony's needs allows for flexible management. Populous colonies are profitable colonies. The full utilisation of bees, equipment and labour, coupled with budgeting and work planning is profitable beekeeping.

ESTATE PLANNING TODAY

Continued from Page 55

protection required in these circumstances.

6. The dutiable estate of a person does not include the proceeds of any Life Insurance policy which although effected on the life of a deceased person is held by someone other than the deceased, provided that the deceased did not acquire it and dispose of it within the three years prior to his death. Accordingly a policy held by a wife effected on the life of her husband will not form part of the husband's dutiable estate. In many cases therefore where a husband had assets of considerable value and his wife has few assets it may be desirable for the life insurance to be effected by the wife on her husband's life. The proceeds will not form part of the husband's estate but can be used by the wife for the payment of duty. The disadvantage of this arrangement is of course that the wife is free to surrender or deal with the policies at any time should she think fit.

BEEKEEPING STARTED IN PAPUA NEW GUINEA

The Author has just returned from another visit to Papua New Guinea during which most of the equipment donated by Beekeepers and other friends in New Zealand for the Beekeeping Project he has organised in that country has been put into use after instruction was given to those who would be working with the equipment. The Author would like to again thank all those who have made this project possible. Although on a relatively small scale, this is an ideal form of international co-operation which could well be emulated in other areas.

By CHRIS DAWSON

ALTHOUGH all the beekeeping equipment sent from New Zealand in January had not arrived in the Highlands of Papua New Guinea when I came at the beginning of May, the building of hives and collection of swarms was not delayed, as enough timber was available to build small hives and the students were keen to really get going.

The first target in starting the Instructional Apiary was to establish ten well-populated hives of bees and have them working as quickly as possible. This was made easier because several buildings on the College campus had swarms of bees in the walls, and owners of properties close to the College were delighted to have bees removed from their houses.

To and from the wall of the vegetable store a steady stream of honey bees flew all day. The numbers in flight indicated that the swarm could be a strong one. After catching and examining some of the flying bees, I could see that they were medium quality Italian. As it appeared that they could be a good colony to transfer into a hive, the necessary equipment was assembled and arrangements made for the task to be started at daybreak next morning. Large oil drums supported wide planks to form a working platform. The frame of the building was sturdy 4 x 2 pine, covered on the inside with ply and on the outside with corrugated iron. This made excellent compartments for bees to live with entrances at the top just large enough for them to come and go without interference from their enemies.

Beneath the line of travelling bees, a small beehive with empty frames was placed high enough to be handy for the bees. Before starting to transfer them, I looked around to see how much spider web had to be removed. From the apex of the roof stretched the electric power line. In the garden beneath were some beautiful poinsettias glowing bright red. Between the two hung a giant spider web which I measured at 12feet high by ten feet wide. In this community web were twenty-three spiders that measured three to seven inches across their long brown and green legs. These webs are quite harmless, but several times I had walked into them to have my glasses dragged of my face. A section of this web was scooped out with the

aid of a long bamboo pole before I started work. A small boy in one of the homes in which I stayed delighted in using a bamboo rod to gather up a handful of these spiders and bring them in triumph to his mother. She always shuddered and told him how beautiful they were before he took them to his playhouse for his morning's fun. Small birds are sometimes caught in these strong webs.

Early the next morning the students and I gathered the equipment to transfer this wild swarm to a beehive. By tapping and testing the ridges of the corrugated iron, we were able to locate the exact position of the bees inside, and we found it would be necessary to remove two sheets of iron. As the students had not yet mastered the skills of this task, I did the job and talked all the time to tell them what was being done.

When the first sheet of iron was removed, we were delighted to see attached to the inner wall a perfect natural honeycomb covered with bees and hanging in full curtains across the compartment in the wall. I gently calmed the bees that were becoming excited about this instrusion into their private lives, and set to work to give them a new home. After the first few minutes of excitement, a little smoke from the bee smoker cooled them down pieces of comb that neatly fitted the frames of our beehive were cut out. These were tied in place with string and then hung in the hive. Four of these made a residence "just like home" and many of the younger bees flew straight to this new home.

It was necessary while cutting the comb to injure as few bees as possible, as the smell of crushed bees causes other bees to become really infuriated. While trimming these honeycombs to fit the frames, there were always brown hands near by that gladly bore away a tasty morsel of honey or unhatched baby bees, both of which were eaten with equal relish. There is nothing more delicious than warm honey straight from the hive.

After fitting the frames with honeycomb full either of food or young bees, I packed the rest of the honey into a bucket — about ten pounds. To complete the job it was necessary to cut out every bit of comb from the wall opening and allow the masses of flying bees to settle at the top where their entrance had previously been. Just before finishing the morning's work; we had a visit from the children and teachers of the kindergarten.

STING IN AN OLD WIVES' TALE

THE OLD WIVES' TAKE that bee stings are good for rheumatic pains may have some truth in it.

Researchers at three London laboratories have discovered that the venom contains a substance that is a powerful reducer of inflamation.

The substance is a peptide — a fragment of a protein molecule. The researchers have named it peptide 401.

It is identical to a peptide isolated five years ago which was shown to have a marked effect on a type of immature blood cell. But its anti-inflammatory properties were not suspected.

Experiments with rats have proved that the pepactive than a cortisone drug tide is about 100 times more against induced inflammation in the paw.

In other tests, using the permeability of blood vessels as a measure of inflammation, the peptide also gave striking results, though data is not yet extensive enough to make definite comparisons.

Oddly, the peptide seems to work because it causes inflammation itself. But it also triggers off reactions that swiftly reduce the inflammation.

Other types of tests with human skin showed that the peptide was twice as potent as salicylate (asprin). In tests carried out with arthritis induced in rats by injection, the peptide gave similar results.

These tests, it is thought, are the nearest to tests with human arthritis. In the researchers' phrase inflammation associated with the disease was "considerably reduced".

Effects were more dramatic if peptide was used simultaneously with the injection, and the disease usually failed to develop.

So far the most reasonalbe conclusion is that peptide 401 is not the reason for the alleged properties of bee venom. More likely is that is causes the release of natural corticosteroids that fight inflammation. None the less the venom does have anti-inflammatory properties whose effect on man is still not known and remains to be explored.

The fact that there were thousands of bees flying around did not curb their curiosity at all.

By late afternoon, there was a cluster of bees as big as a coconut hanging to the top of the wall where their home used to be. They were left so that the coolness of the night would make them crowd closer, and at 5a.m. (dawn 6a.m.) next day I visited them with a bucket of cold water, a garden spray and a hand brush and crumb tray borrowed from the kitchen. The bees were behaving perfectly and were in a tight cluster at the top of the wall and were cold, calm and quiet. I sprayed them with a soft light spray of cold water until they looked just like an uncooked Christmas pudding — damp, mushy and having an almost drowned appearance. They were just right for an operation that is one of the surprising things about bee behaviour.

I took the brush and tray and with a swift movement whisked them off the wall into the tray and them dumped them into the beehive, where they were covered with a lid of wire insect gauze. Before they knew what had happened they were in their new home where I wanted them. It is a wonderful thing that a thorough wetting of bees will not kill them as long as they can cluster together again and get dry before their body warmth is quite lost. After a cluster of bees has been treated in this way it is unusual next day to find any dead.

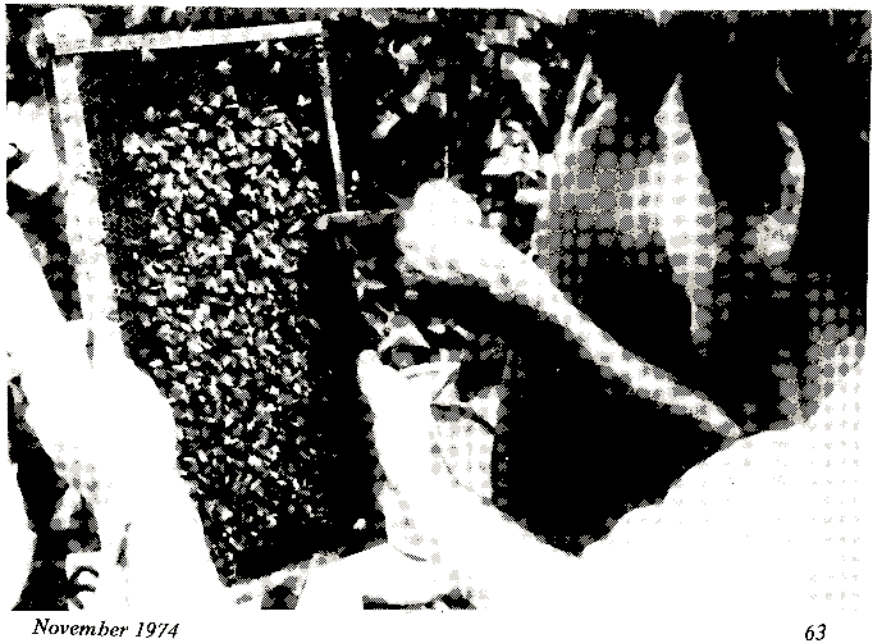
With the colony safely housed in its new hive, it was placed in the coolest place and could be found — under the water tank — for three days. They were then transferred to the citrus orchard and adopted their new locality quite happily.

On one occasion I placed one of these new hives with its fly screen lid under the water tank. During the day there was a tropical downpour and the overflow pipe poured into the hive and flodded it. Next day the bees were all alive and working as usual.

After a month's tuition the students had ten beehives working and were sufficiently competent to be left to manage without supervision. They regularly checked the growth of each hive, located the queen, looked for eggs and young bees and noted how much pollen and nectar was being stored. All this was recorded in a report book for each hive.

At first the students dressed in long-sleeved shirts with long trousers, but after four

There's the Queen!



week's experience, these were discarded in favour of their ordinary workday clothes of shorts and short-sleeved shirts. They were quite relaxed without veils or gloves. It was delightful to see one of there keen young men sitting beside an open hive writing the report while his working partner knelt at the other side, lifted out the combs covered with bees and called out the comments to be recorded in the report.

The Queen's Birthday holiday showed where the interests of the students lay. They were given the choice of a holiday or going bee hunting. Thirteen chose the latter and two swarms were dealt with during the day. Five days later, ten students chose to use their Saturday in hiving bees from the building used by the local storekeeper. While I stood in the background just giving occasional instruction, the students stripped off the weatherboards, cut the honey comb, tied it into empty frames, brushed bees into the hive and gently sprayed the bees returning from flight with cool water. It was an excellent performance which gave tremendous satisfaction. This colony settled i to its new location at the College very quickly and by now, will be gathering a crop of honey. With the new hive we also took back half a bucket of honey that was popular because of its mild flavour and medium colour.

At the end of the College term I took the opportunity to visit other areas where beekeepers were having problems of colony management. Some had asked if it were possible to visit them to discuss their difficulties. Also I wanted to visit the Southern Highlands where Cuthbert and Elizabeth Taylor of Hazelburn, Pleasant Point, are stationed. Cuthbert is a lecturer at the Dauli Teachers' College. Here I was invited to lecture two classes of students on bees and elementary beekeeping. Many questions were asked, but the one that gave the greatest pleasure was "How do I get started keeping bees?"

Each day I searched around the flowering plants and shrubs in this area but was unable to find a bee. One of the local Hulli tribesmen heard of my interest in bees and brought a bucket in which were some stupefied bees and honeycomb. I was particularly interested in these. Owing to the language barrier, I was not able to find out how he made the bees unconscious (they were still alive). The honeycomb had neither honey nor pollen in it and the unhatched baby bees were starving. I wondered if this locality with its tendency to cold afternoons was a place where bees would not thrive.

The local market is close to the college. First thing in the morning, Huli women dressed in drab greys and browns hurry along with giant loads of vegetables hung on their backs in bags suspended from their foreheads. Also on the way to market strolled the Huli men carrying no loads, but decorated with neck ornaments of boar tusks and a hornbill beak hanging between the shoulder blades, ornamental grass skirts and fantastic hats. The base of these hats is woven of human hair. It stretches out to the point nine to twelve inches each side over the ears. The top and front are decorated in designs using gold everlasting daisies. While the flowers are growing, the tribesmen jealously guard them from being seen by their women. In their rope belts is carried a cutting bone made from the leg of a cassowary bird.

All the drably dressed women and children with vegetables, pigs and dogs were crowded on one side of the market where the buying and selling was going on. On the opposite side of the market on a slight rise stood the gorgeously dressed tribesmen watching proceedings. Occasional relief to the drab clothing of the women was given by tribespeople from other areas who with their children wore bright colours. Of one group of these I asked in Pidgin for permission to take a photo and the lady with a charming smile said, "Yes, certainly."

The landscape in this area is very similar to the West Coast of our South Island. Where the jungle has been cleared, huts and gardens have been made and beside the College campus is a rugby field with a backdrop of tall trees. One slope has been burnt off to provide firewood, and the stream stealing its way amongst the green tangled creepers and tall trees could have been close to Greymouth.

The road from Dauli to Tari airfield is a bare nine miles long, but it takes forty boneshaking minutes to cover in a light truck. This journey is made twice daily to take children to and from school. The technique is to grip tightly the seat or a stanchion of the canopy and allow the truck to rock and roll around you. In many places high barricades of pointed stakes line the

roads, with low doorway entrances to the gardens and huts. Inside the doorway is a norrow trench so that any raiders could be coped with one at a time. Although the need for these defences is not as great as it used to be, the Huli people are proud of their tradition and culture and resist the inroads of other cultures.

The only access to this Highland retreat is by plane, which increases the cost of all goods by 15 cents per pound. The flight over miles of jungle-covered mountains is full of spectacular acres of deep ravines, lakes and tussocky clearings lined with tree ferns. The plane snakes in and out amongst the mountains, and the low flying enables the jungle trees and their flowers to be easily identified.

On this journey I saw for the first time Mt Gilauwe, the highest mountain in Papua, 13,400 feet above see level. There is no snow and jungle hugs the slopes to 11,000 feet, but beyond that, tussock and moss cling to steep slopes that would be a challenge to any rock climber. One peak looks like a finger held aloft — tall and slim with a dome on top. At "The Gap" we climbed over the main divide at 10,000 feet and slipped into another world.

After Dauli in the Southern Highlands, I went to Kumbareta in the Western Highlands where several New Zealanders are stationed in the beautiful Baiyer Valley. While I was unpacking on the morning after arrival, a message was received that a swarm of bees had just settled on the house next door. An hour later another message came that a further swarm had arrived at a house further along the valley. Since my previous visit last year, they had not been troubled at all with bees, but as soon as I arrived the bees arrived, too, to give a welcome.

As i went to deal with the first swarm, I saw two delightful children playing near the track. When I tried to capture this beautiful picture on my camera, one of the little girls immediately ran away yelling. Her little friend said she thought I was going to eat her. It seems the tables are turned.

There are no beekeepers in the Baiyer Valley and in such a valley of flowers I am sure hundreds of beehives could obtain good crops of honey. Some day, I hope.

A few days rest in the Baiyer Valley was welcome. From here I went to Nondugl in the Wahgi Valley where bees are kept to supply honey for birds at the Bird of Paradise Sanctuary. My arrival coincided with bath time for the snakes. Bruce Rose had two black and white pythons about seven feet long bathing in tubs on the lawn. After their bath and a towelling by their keeper, they lay on the lawn soaking up the warm sun. I mentioned to Bruce that I would rather handle bees than snakes, to which he quickly retorted, "Give me snakes any time. At least I know what my snakes will do, but I can't cope with those bees of yours." I still prefer bees.

A day used in reassembling the Nondugl hives was well spent. Like the problems of most of the beekeepers I met, it was simple to overcome once it was isolated. After checking

Laurie and two students inspecting hives.

and establishing the hives in new equipment, Gerry Rose showed me the truly beautiful birds that are held there for study and conservation. Although there are many birds in the jungle, their survival depends on remaining unseen by the bird hunters. At the sanctuary they are more tame and their beauty can be seen at close quarters. The gossamer loveliness of the Bird of Paradise tail plumes and their bright and assorted body colours show avian beauty at its best.

It is interesting to note that although the

distance from the College at Banz to the Bird Sanctuary at Nondugl is a mere twenty miles, the rainfall at Banz is eighty inches per year compared with one hundred and sixty inches at Nondugl. Despite the heavy rainfall, bees really thrive there.

During my absence from College, the students who had remained on campus during the term holidays and gained confidence and were ready for further lectures and tuition. Although most of the beehives established were of the conventional type as we know them, a village-type hive was also set up, as this is the kind that most students will be able to start with. It requires a minimum of cash and all materials are available in even the most remote village. All that is necessary is to be able to locate a swarm of bees in a tree or building.

From the Wahgi Valley I went through the Chimbu area which is geographically very interesting, and the people most fascinating.

A recently established apiary of thirty colonies was thriving and seems to indicate that the area is excellent country for the beekeeper.

A friend invited me to join a party that was going to climb Papua New Guinea's highest mountain, Mount Wilhelm (15,400 feet). It was planned to travel by jeep to the alpine hut at 9,000 feet, follow a jungle track to 11,500 feet and stay at the alpine hut while the main party ascended the peak. From Banz, the smooth dome of Wilhelm 35 miles away looked very inviting and I had been told that a walking track traversed the range. It all sounded so easy and I reckoned I could walk a long way if given time and no pack to carry. I am now much wiser.

We left Goroka in the Eastern Highlands at 4.30 a.m. and travelled over the difficult Daulau Pass on the Highland highway to Kundiawa in Chimbu country. This distance of 54 miles took 2½ hours. For the next three hours we travelled about 30 miles, mostly in low gears and often in four-wheel drive. This country is all steep with slopes of 45 to 60 degrees up to the horizon. If the mountains around Mitre Peak were covered with gardens and huts instead of bush and similarity would be obvious. This is the most densely populated area in the whole of Papua New Guinea, and every patch of soil must grow something.

The road stole up a valley beside a stream then snaked round a steep slope before dropping by a slippery stretch into another valley so that we would cross a bridge of logs laid across other logs. In fact, the road did everything except catch its own tail. Our vehicle had a bar along the dash and three front seat passengers. By holding firmly to the bar and clutching the seat belt, we were able to look occasionally at our watches and wonder when or how the journey would end.

At 8,600 feet we saw the highest air strip in Papua New Guinea. A well-built sealed runway — (question — how did they ever get heavy machinery there if build it?). Not far beyond this we came, at 10 a.m., to the end of the road. Local residents are quite pleased to be engaged as porters but I was somewhat reluctant to employ a rather slim native girl for the task. Others of the party assured me they are most reliable and soon my kit was resting in a string bag (billum) suspended down the back and hung from the forehead of a springhtly lass who trotted up the track like a mountain goat. I followed at a much more sedate pace and she waited every short while for me to catch up. Here began one of the most enjoyable walks of a lifetime. Every few paces there was something new to see. The wealth of flowering plants, climbers and shrubs was amazing.

Most of the jungle trees were not familiar, though some were similar to New Zealand trees. I believe some of the flowers were not native. I saw rhododendrons (one special, with a golden trumpet three inches long); mistletoe with a deep red flower the pistil of which hung pendant for an inch; rarika (sou thistle), same as ours; pink and white cosmos; montbretia; oxeye daisies; cape gooseberries; toi toi; red geraniums; canna lilies; large pink clematis; banana passion flowers and fruit; many meadow buttercups; blue forget-me-nots; two kinds of bidi bidi (same as ours); water cress; a small patch of white clover; a climber very like chinese gooseberries though I could not find any flower or fruit, and many orchids. I was able to enjoy a meal of wild strawberries and also a fruit like a compact wild raspberry. There were shrubs similar to our coprosma and broadleaf, a macropiper and many pandanus rather like our cabbage trees. At the higher levels were several senecio and celmisia and shrubs like our manuka.

For five hours I rambled over the rough jungle track but the last half-hour, which took us above the 11,000 mark, was a long

time and a long way. By 3p.m., after having eaten little since 3.30 a.m., I was breathing heavily and leaning hard on my walking staff. The last 400 yards to the alpine hut was a long, long way. But it was worth it all to break from the jungle, climb a tussocky ridge beside the waterfall and emerge to a magnificent panorama of mountains, waterfalls and a lake of reflections.

To right and left steep slopes climbed high into the sky. On the horizon straight ahead, stark against a blue sky, stood a shoulder of Wilhelm. On a near slope a crystal waterfall tumbled to the lovely lake with its small gemstone of an island hung near its shore. It was such a moving scene of grandeur that my eyes misted. Hunger was forgotten, as also were my trembling legs and bongo-beating heart — I could only gaze.

Then suddenly I came to earth. Just beside the alpine hut sat my little porter guarding my kit and wondering how long it would be before she received her pay. She had probably been sitting there for hours hoping that slow lapun would arrive, soon.

Our party totalled 32 and we worked it out that if each person occupied a space sixty inches long by twenty-four inches wide, we could sleep in a small tent and a grass hut used as cookhouse. With five layers of clothing and a sleeping bag I managed to keep reasonably warm. At dawn I discovered the waters of the lake were refreshingly cool to a tired body.

From our mountain eyrie we could see towards the end of the Chimbu valley Mt Otto 10,000 ft and Mt Michael 12,500 ft, but Mt Hagen 13,100 ft and Mt Kubor 14,000 ft were not visible.

Later that morning a group of students walked to the far side of the lake, rested in the sun and watched the reflections. From across the lake the echoing from the hills came their song as the song of angels:—

O Behlah land, sweet Benlah land,
As on the highest mout I stand
I look away across the sea
Where mansions are prepared for me,
And view the shining glory shore,
My heaven, my home for ever more.

They were enjoying worship in the most inspiring cathedral they had ever known.

At 4 a.m. next morning the summit climbing party went out into the cold fog just as it was closing in on the tops. The track is clearly marked, but it was so cold at over 14,000 ft that some of the party had to turn back when nearly at the summit. For a few minutes this party was able tosee to see the lighthouse at Madang on the coast to the north.

The base camp party explored the closer slopes and were able to see some of the beautiful birds that live in this high country. It was not pleasant to be shown a black and white bird similar to a blackbird impaled on the end of a bird arrow by one of the natives. In a demonstration of their skill with bow and arrow they were able at forty yards to snap a leaf off the end of a branch with a three-pointed bird arrow.

Native huts in the Chimbu area are built with the poles that support the roof peeping through the ridge at each end and in the middle. To stop rain from running down the poles, orchids are planted on top and as they grow, they shed the rain and suck up enough moisture to live and look beautiful.

On the return journey there was enough rain to make the road slippery, and once the vehicle in front gently slithered into the bank while we yelled advice that made no difference. We were all thankful that it had not slipped over to the other side of the road towards a steep drop to the river below.

The slow travelling allowed us to drink in the unusual scenery. The steep landscape is covered with gardens and each razorback slope has a well-worn path running up its length. Here and there huts and plantations of banana and pineapple are tucked into less steep places. Gardens are separated by low fences of sharp stakes, while the fences which surround the houses are built of a double row of sharp stakes about five feet high on the bank of a trench.

The Chimbu girls in our jeep told us many tales of the traditions and customs of these people. Unlike the women of other areas, these girls and women dress in bright colours and adorn themselves with an assortment of ornaments, feathers and skins. We saw several beautiful teenage girls with brightly-painted designs on their bodies and skins of the tree kangaroo hung from their shoulders. The men also love to dress up in various kinds of brightly coloured and ornamental native clothing. These are a happy people, but their rugged individualism seems to bring them into conflict with authority.

As I was packing my suitcase in preparation for my return to N.Z. via Port Moresby, I was told of a beekeeper whom I had not yet met. On meeting him I was urged to stay and help him get his bee problems right. As I had a plane to catch I promised to give him the help he needed by correspondence. If only we had met a day earlier I could have overhauled his hives and been of immediate assistance.

My contact with beekeepers and those who wished to become beekeepers made it obvious that they needed an organisation where they could obtain information and meet to discuss methods and problems. I wrote to several people and organisations suggesting a meeting in Port Moresby just before I left for New Zealand. The idea was enthusiastically taken up and over twenty people met in conference at Port Moresby. It would appear that as a result of this, some kind of Beekeepers Association will be formed.

I also wrote to the Chief Minister of Papua New Guinea outlining some of the problems faced by beekeepers and potential beekeepers, and he sent a representative of the Foreign Relations Department to discuss these with me and make some suggestions. I have agreed to submit my proposals in greater detail for consideration by the Government Departments concerned.

Finally, to the beekeepers of New Zealand who subscribed and made it possible for me to do this work, I want to express my deep thanks. It was a wonderful opportunity to be useful. My health was excellent except for three days towards the end of my stay. One question often asked and one to which I could not give an answer was, "When can you come again?"

Since this was written, news has been received that a graduate of the College is taking a hive of bees home to the Southern Highlands. We hope this is the first of many.

The National Beekeepers' Association

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

'Better Beekeeping—Better Marketing'

SUBSCRIPTION RATES

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	$52.00
401 to 500 hives	$20.00	1401 to 1500 hives	$56.00
501 to 600 hives	$24.00	1501 to 1600 hives	$60.00
601 to 700 hives	$28.00	1601 to 1700 hives	$64.00
701 to 800 hives	$32.00	1701 to 1800 hives	$68.00
801 to 900 hives	$36.00	1801 to 1900 hives	$72.00
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 attributable to the action of the members' bees and arising from his or her negligence as the beekeeper. The cover is underwritten by the New Zealand Insurance Company Ltd and the premium 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. Stanton, P.O. Box 4106, Auckland, not later than the 25th of the month preceding publication.

Nome-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

Full Page	$20.00	Per Inch	$2.00
Half Page	$12.00	Min. Charge	$2.00
Quarter Page	$7.00	for each insertion.	

FRONT PAGE STORY

PAPUA NEW GUINEA BEEKEEPING PROJECT

Thanks to the vision and hard work of the indomitable Chris Dawson, of Timaru, the Papua New Guinea Beekeeping Project is now an established fact.

And the happy faces of the locals in our cover picture leave no doubt as to their acceptance of this self-help project. For, after all, its aim is to become self-perpetinating in every sense of the word.

A large amount of money has been provided for the equipment to get the project under way. But Chris has paid his own fare to Papua New Guinea on at least two occasions.

New Zealand Beekeepers will follow with interest the development of the project and, hopefully, will sponsor its extension into other areas of that land.

Some excellent colour slides were submitted with the story but these have lost a lot in the conversion to black and white for reproduction in the magazine.

Read the full story this issue.