THE NEW ZEALAND BEEKEEPER

AUGUST, 1969

THE NATIONAL BEEKEEPERS' ASSOCIATION of N.Z. Incorporated

President:

Mr. D. A. BARROW
44 Baycroft Ave., Tauranga.

Vice-President:

Mr. G. WINSLADE
1H R.D., Oamaru.

Executive:

Mr. BRUCE FORSYTH
Box 3, Ohaupo, Waikato.

Mr. F. BARTRUM
Pleasant Point,
South Canterbury.

Mr. T. GAVIN
Titoki, 2 R.D., Whangarei.

Mr. I. DICKINSON
Box 55, Milton, Otago.

General Secretary:

Mr. K. E. MOODY
A.P.A.N.Z., A.C.I.S.
Box 40-127, Upper Hutt.

Editor:

Mr. L. W. GOSS
P.O. Box 3561, Auckland

Hon. Librarian:

Mr. CHRIS DAWSON
P.O. Box 423, Timaru

BRANCHES

FAR NORTH
President: Mr. D. D. Matthews, Awanui Road, Kaitaia.
Secretary: Mr. M. D. Haines, P.O. Box 284, Kaitaia.

NORTHLAND
President: Mr. A. G. Tucker, 35 King Street, Whangarei.
Secretary: Mr. Des Cullen, 15 Grey Street, Whangarei.

AUCKLAND CENTRAL
President: Mr. J. Brookfield, 26 Liverpool Avenue, Papatoetoe.
Secretary: Mr. P. W. Keenan, 54 Patteson Ave., Mission Bay.

WAIKATO
President: Mr. P. D. Carey, Longview R.D. 2, Huntly.
Secretary: Mr. H. N. Tuck, Kihikihi, Waikato.

BAY OF PLENTY
President: Mr. G. C. Higgins, Waihi.
Secretary: Mr. A. C. Barrow, 71 Cameron Road, Te Puke.

HAWKES BAY
President: Mr. I. Berry, Box 16, Havelock North.
Secretary: Mr. R. N. Morse, C/O Vidals Vineyard, R.D. 2, Te Awanga.

C/S. HAWKES BAY
President: Mr. D. L. Ward, Guy Street, Dannevirke.
Secretary: Mr. E. Rowe, 6 Runciman St., Dannevirke.

NELSON
President: Mr. M. O. Burke, 36 Beachville Cres., Nelson.
Secretary: Mr. W. R. Cox, 19 Ulster Street, Wakatu, Nelson.

WEST COAST
President: Mr. J. V. Glasson, Blackball.
Secretary: Mr. T. Holland, Weenink Road, Karoro, Greymouth.

CANTERBURY
President: Mr. R. R. Bushby, 193 Wairakei Rd., Christchurch.
Secretary: Mr. A. R. Eagle, 22 Hillsborough Tce., Christchurch, 2.

SOUTH CANTERBURY
President: Mr Eric Robins, Pleasant Point.
Secretary: Mr. M. D. Cloake, Fairview, 2 RD, Timaru.

NORTH OTAGO
President: Mr H. S. Wilson, 2C R.D., Oamaru.
Secretary: Mr. R. B. Mackie, 52 Frome Street, Oamaru.

OTAGO
President: Mr. C. W. Foote, 377 Kaikorai Valley Rd., Dunedin
Secretary: Mr. W. R. Sanson, 9 Warwick Street, Dunedin.

SOUTHLAND
President: Mr. W. T. Herron, Greenvale, Waikaka.
Secretary: Mr. S. M. Booth, Drummond, R.D.4, Invercargill.

THE NEW ZEALAND BEEKEEPER

VOL. 31 No. 3

Published Quarterly in February, May, August and November, by the National Beekeepers' Association of New Zealand (Inc.) in conjunction with the N.Z. Honey Marketing Authority.

Subscription: $1 per annum, post free

Registered for transmission by post as a Magazine.

Editor: Leslie W. Goss

AUGUST, 1969

CONTENTS

	Page
Dominion Conference 1969	2
National Executive Meets	8
President's Report	10
Agricultural Chemicals Board	14
Report from Wallaceville	16
Honey Marketing Authority	20
Simple Method of Drying Cappings for Smaller Beekeepers	24
Beekeeping in North America	28
Beekeepers' Technical Library	31
Book Review	31
New Variety of Clover Attractive to Honey Bees	32
From the Editor's Desk	36
Proposed Tour to Canada	38
Branch Notes	39
Swarming in Honey Bee Colonies	41
Classified Ads.	43-44

B. L. DISEASE

THE PROSECUTION reported elsewhere in this issue, which details the illegal movement of diseased hives from one site to another will serve as a reminder to apiarists of their obligations to comply with the Regulations designed to protect other beekeepers as well as themselves.

Few of us manage to go through life without infringement of some law or Regulation at some time or other, and it is easy to offend without intent. Very few enforcement officers enjoy having to report a man for an offence and possible punishment, for they too, are human, and are equally capable of making a mistake. Where offences against the Road Code are concerned, it is all too easy to fall foul of the law.

Responsible members of the industry must surely realise that it is the avowed and oft repeated demand of beekeepers as a body that destruction by fire is the only answer to the disease in New Zealand, and until such time as a proven alternative is found and Parliament decides otherwise, Apiary Instructors must see that the existing Regulations are carried out.

It is an invidious position to be both friend and prosecutor, and Apiary Instructors of the Department of Agriculture not only have the task of safeguarding the health of bees, but also policing the premises in which honey is extracted as representatives of the Health Department.

A friendly reminder that conditions are not as good as they should be, and that standards of cleanliness are not all that may be desired is sufficient up to a point, but where an offender continues infringement of reasonable conditions action should and must be taken. Apiary Instructors who carry out their job efficiently and fairly, will always have the support of the industry.

NATIONAL BEEKEEPERS' ASSOCIATION

DOMINION CONFERENCE

INVERCARGILL — JULY 16 and 17

PRECONCEIVED IDEAS OF NORTHERNERS THAT THEY WOULD BE HALF FROZEN IN THE EXTREME SOUTH OF NEW ZEALAND WHILST ATTENDING CONFERENCE PROVED TO BE COMPLETELY ERRONEOUS, AND THE ADDITION OF THICK UNDERWEAR AND SLEEPING ATTIRE WAS AN UNWANTED AND UNWARRANTED WASTE OF EFFORT IN INCREASED WEIGHT. EVEN HAD THE THERMOMETER SHOWN A READING IN THE VICINITY OF FREEZING POINT, THE WARMTH OF WELCOME BESTOWED BY THE SOUTHERN HOSTS WOULD HAVE MADE UP FOR THE WORST THAT CLIMATIC CONDITIONS COULD HAVE INFLICTED. DELEGATES FROM ALL OVER NEW ZEALAND ATTENDED AND WITH VISITING MEMBERS AND THEIR WIVES TOTALLED 140 AT THE FORMAL OPENING PROCEEDINGS BY THE MINISTER OF AGRICULTURE, THE HON. MR B. E. TALBOYS, M.P.

THE HOST BRANCH ARRANGED A MOST ENJOYABLE GET-TOGETHER SOCIAL GATHERING ON THE EVENING OF TUESDAY JULY 15, FOLLOWED BY A COCKTAIL PARTY, DINNER AND DANCE ON THE WEDNESDAY. A COACH TRIP WAS ARRANGED FOR THE LADIES TO SEE POINTS OF INTEREST WITHIN THE CITY AND ITS ENVIRONS ON THE AFTERNOON OF THURSDAY.

In his opening address Mr Talboys referred to the fact that at June 30 last there were some 3,200 beekeepers in New Zaland operating 192,000 colonies with a production of 6,670 tons of honey; — 26% more than the previous five year average and the best since 1955. Despite this increase in production, average honey yield per hive in 1955 was 86 lbs, whereas in the current season it was only 72 lbs. The fall can be explained by a number of factors including sensitivity to climate and corresponding local variations, changes in agricultural practices and a fairly general increase in cereals and other arable crops tending to reduce bee pasturage. The industry nevertheless makes a most valuable contribution in the horticultural and small seeds industries, and should be maintained at a level to ensure essential pollination service.

Referring to marketing, Mr Talboys said that no-one needs to be reminded that throughout its history, the marketing system has been the focal point for argument within the industry. The search for a really satisfactory procedure has gone on for many years and will no doubt continue to do so, and with the size of the crop varying from year to year,the principal concern of the architects of marketing schemes has been the achievement of reasonably stable prices from season to season. With a sufficiency for domestic needs, the difficulty has been to organise the sale of surpluses to ensure a reasonable amount of honey available each year for export and to maintain interest and goodwill of those who buy our honey overseas.

A major problem of successive marketing organisations has been financial backing, for in years of plenty they had sufficient funds to buy all the honey offered, and in years of scarcity they were unable to compete with the high prices producers obtained on the local market. As a result, honey importers in the

United Kingdom could not rely on regular supplies each year from New [illegible] and made other arrangements for honey from other countries.

In 1953, producers were given the opportunity to organise the marketi[illegible] their own products, and the Primary Products Marketing Act passed which down the procedure for establishing marketing authorities, thus enabling the N[illegible] Honey Marketing Authority to be established as a fully executive statuto[illegible] producer organisation.

Stability has been maintained over the years despite fluctuations in supplies, but success of the Authority's marketing policy has been achieved at the expense of financial strength, using reserves to pay the producer in years of short crops, and since its inception, the Authority has relied on Government assistance to finance purchase of honey.

From time to time, the authority had been asked to build up reserves and reduce its reliance on this support, but it was now more heavily indebted than at any time in its existence.

"To some extent, this is because of the need for a considerable sum of money to buy a near-record crop, but I am bound to say that in the Government's view the authority should have made some provision for this contingency.

"The additional overdraft accommodation has been granted, but at market rates of interest, and subject to periodic reviews, to ensure that everything is being done to place the affairs of the authority on a sounder financial footing.

"Within the past two years the authority has acquired two packing plants and embarked on a course which leads it into competition with private packers on the local market," said Mr Talboys.

"This was a radical change from its earlier role of drawing off the surplus honey for export, and allowing the local market to be supplied mainly by private packers.

"The effect of this undoubtedly has been to give rise to questions about the role of the Authority, the financial arrangements it has, and its position in relation to private packers.

"Although the beekeeping industry has given its support to the change, the authority must show that it can organize its affairs efficiently and economically, and by doing so reduce reliance on Government-backed finance."

That support, he added, was not available to the private packer.

Inevitably, consideration has to be given to the levy which was established in 1938 to assist in stabilising prices, having regard to low prices being obtained for exports in relation to the local market.

When the Authority took over control of marketing in 1954, the levy was increased to 1d per lb and that level has been retained ever since. Some pressure had been exerted from some sections of the industry for the levy to be phased out, and this question would be discussed at Conference.

The Minister gave assurance that Government would give full consideration to any alterations which might be recommended.

Another related problem has been the Association's proposal that the HMA Regulations be amended to provide for a system of differential rights for producers voting at the Authority elections. At present, producers supplying the Authority and those supplying packers have equal voting rights based on honey supplied or levy paid, subject to a maximum of 30 votes. The proposal put forward was to give the producer supplying a private packer half the number of votes to which he is at present entitled. Both classes would have additional votes based on hive holdings, but the 30 vote maximum would be maintained.

Government had had a good look at the Association's request, but it had been declined because of the number of objections based on the inequity of the proposal.

Referring to the Apiaries Act, Mr Talboys said that the origin of the Act went back to the last decade of last century, when it was realised that without the help of the Government inspectors supported by legal powers, bacillus larvae

could ruin the commercial production of honey in this country. In those early days there were probably few apiaries free from the disease, and an Act was passed in 1908 and consolidated in 1927 which, with some amendments, has stood for 40 years to the credit of its originators and the law draftsmen at that time.

However, it was apparent that the old Act and Regulations should be consolidated and amended to conform with accepted practices of today, and for this reason a new Apiaries Bill would be introduced during the current session of Parliament. There had been very close consultation between departmental officers and leaders of the industry, with a very substantial agreement to the proposals in the new Bill.

The Minister referred to the baffling problem faced by beekeepers and the Government in regard to the problem of Tutu, and he was glad to be able to sponsor an Amendment to the Apiaries Regulations a few months ago enabling the Bay of Plenty to become a restricted zone instead of a prohibited area, enabling some aspects of beekeeping to be undertaken, particularly for queen rearing and bee feeding, but the success of the scheme will depend on the full co-operation of all those participating, combined with a high degree of responsibility on the part of every beekeeper concerned.

PROCEEDINGS

Following the opening of Conference by the Hon. Mr B. E. Talboys, Minister of Agriculture, the Annual Report of the National Beekeepers' Association was presented by the President, Mr D. A. Barrow, and that of the HMA by the Authority's Chairman, Mr J. W. Fraser. Details of these and other reports are published elsewhere in this issue.

REMITS

REMIT NUMBERS CORRESPOND TO THOSE APPEARING ON THE ORDER PAPER, AND IN SOME INSTANCES WERE AMENDED BY UNANIMOUS CONSENT AND WITH THE APPROVAL OF MOVER AND SECONDER. REMITS NOT DETAILED WERE WITHDRAWN OR LAPSED. MOVERS OF MOTIONS WERE PERMITTED THREE MINUTES TO DETAIL THEIR SUBJECT, OTHER SPEAKERS TWO MINUTES FOR OR AGAINST MOTIONS, SUBJECT TO AN EXTENSION OF TIME IN EACH CASE AT THE WILL OF CONFERENCE.

HONEY MARKETING AUTHORITY:

(1) **SOUTHLAND:** "That the H.M.A. be encouraged at Meetings of beekeepers to discuss matters of current policy." (Herron/Glynn). CARRIED.

(2) **AUCKLAND:** "That H.M.A. activities in buying the two packing Plants be endorsed." (Blair/Belin). CARRIED.

(3) **AUCKLAND:** "That in order to keep the industry up to date on recent happenings the H.M.A. be asked to investigate the possibility of supplying three months or six months' balance sheets to branches." (Belin/Blair). LOST.

(4) **CANTERBURY:** "That the Executive investigate a more equitable means of collecting an Industry Fund—as is now collected through the Seals Levy." (Bray/Penrose). CARRIED.

LEGISLATION:

(6) **SOUTH CANTERBURY:** "That Executive take necessary steps to ensure that Regulations are promulgated to define and control the marketing of beech honey dew." (Cloake Jnr./Bartrum). CARRIED.

(7) **SOUTH CANTERBURY:** "That this Conference recommend an amendment to the Liquor Act to allow for the production and sale of Honey Mead." (Bartrum/Cloake). CARRIED.

(8) **OTAGO:** "That Executive again press the Government for compensation for hives destroyed by B.L. disease." (Foote/Berry). LOST.

(9) **CANTERBURY:** "That the Executive again press for tax incentives for the export of honey packed in retail containers." (Bray/Berry Jnr.). CARRIED.

DEPARMENTAL:

(10) WAIKATO: "That in view of the importance of floral source packs to our industry the Department of Agriculture be requested to set guide line standards when honey is packed with floral source descriptions as its sales appeal." (Carey/Davidson). CARRIED.

(11) AUCKLAND: "That the honey grader remains independent of the H.M.A." (Blair/Belin). CARRIED.

RESEARCH:

(12) BAY OF PLENTY: "That this Conference recommends the Department of Agriculture treats as a matter of urgency the investigation into finding a suitable poisonous wasp bait." (Barrow/Carey). CARRIED.

(14) SOUTH CANTERBURY: "That the DSIR be asked before liberating any parasites there be prior consultation with the Apiculture Research section at Wallaceville in order that no parasites harmful to the beekeeping industry be released." (Bartrum/Cloake Jnr.). CARRIED.

HIVE MANAGEMENT:

(15 SOUTHLAND BRANCH: "That the NBA requests Government to permit the beekeeping industry to import duty free sugar into New Zealand for feeding bees and so freeing more honey for export, and that Executive continue to explore the possibility of reducing the sugar price to beekeepers." (Heron Jnr./Bartrum). CARRIED.

(19) SOUTHLAND: "That an import licence be made available for Krawaite Pollen Supplement for New Zealand use." (Herron Jnr./Glynn). LOST.

ASSOCIATION:

(21) SOUTH CANTERBURY: "That the name of the N.Z. National Beekeepers be changed to the N.Z. Honey Farmers Assn." (Bartrum/Cloake Jnr.). LOST.

(22) HAWKES BAY: "That Conference directs the incoming Executive to make reports of its meetings available to Branch Presidents and Secretaries within fourteen days of the conclusion of the meeting." (Berry/Berry Jnr.). CARRIED.

GENERAL:

(23) OTAGO: "That a request be made to farmers at the time of sending in Farm Census Returns to include a memorandum on any wild hives of bees on their property." (Foote/Heinemann). LOST.

(24) WEST COAST: "That the N.B.A. publicise again the danger of dumping honey cartons etc. where accessible to bees." (Holland/Carey). CARRIED.

(25) HAWKES BAY: "That the Government be informed that Conference welcomes the apparent increased Government awareness of the need for reduced costs in honey marketing procedures." (Berry/Berry Jnr.). LOST.

(26) WAIKATO: "That in order to keep the public and particularly children better informed as to the honey bee and its characteristics, simple information be published for school use." (Carey/Tuck). CARRIED.

(27) AUCKLAND: "That future Conferences be held at a central area (with Blenheim suggested as a venue) and that all finances be covered by the N.B.A." (Belin/Blair). LOST.

(28) AUCKLAND: "If the previous Remit is not carried Auckland Branch requests the next Conference be held in Auckland." (Blair/Belin). CARRIED.

NOTICES OF MOTION FROM EXECUTIVE:

THE ASSOCIATION'S RATES OF SUBSCRIPTION: "That the annual subscription to the Association be: 0-20 hives $2.00, 21-200 $4.00 thereafter the rate to be $2.00 per 100 hives up to a maximum of 2,000 hives, and that the branch retention be altered from 40% to 30%." (Winslade/Gavin). CARRIED.

H.M.A. VOTING QUALIFICATIONS: "That Conference endorses steps taken by Executive to implement the decision of 1968 Conference to amend the voting qualifications for the Honey Marketing Authority and requests Executive to continue with their endeavours in this matter." (Barrow/Winslade). CARRIED.

NOTICES OF MOTION

"That the State Services Commission be requested to recognise the Diploma in Apiculture in fixing salaries of Apiary Instructors." (Bray/Penrose). CARRIED.

"That Conference requests Executive to continue investigations into the cadetship scheme in beekeeping as recently proposed and if found necessary to appoint a committee to assist in obtaining such a scheme". CARRIED.

"That to ensure the maximum publicity for the promotion of honey during each Conference, the Executive be notified 2 months prior to annual Conference of the proposed promotion programme to be undertaken by the host branch. Executive to decide on whether to support this programme and to what extent." CARRIED.

ELECTION OF OFFICERS

Nominations were called for the office of President of the NBA for the ensuing year, and the chair was taken by the General Secretary Mr Keith Moody who called for a secret ballott under the preferential voting system. Mr P. Clinch and Mr G. McKenzie of the Department of Agriculture were appointed official scrutineers, and the declared results were:

PRESIDENT: Mr Don Barrow of Tauranga.

VICE-PRESIDENT: Mr George Winslade of Oamaru.

MEMBERS OF EXECUTIVE: NORTH ISLAND: Messrs Bruce Forsyth, Ohaupo and Terry Gavin, Wangarei.

SOUTH ISLAND: Messrs F. Bartrum, Pleasant Point and I. Dickinson, Milton.

It will be noted that there is no change in personnel of officers of the NBA for the ensuing year, a recognition by Conference of the service rendered to the industry by the members concerned.

LIFE MEMBERSHIP

On the motion of Canterbury Branch an unanimously endorsed by Executive, it was proposed and seconded Bray/Penrose Snr: that the bestowal of Life Membership be given to Mr Tom Pearson for his long and devoted service to the beekeeping industry in the form of personal assistance to individuals, instructive contributions to THE NEW ZEALAND BEEKEEPER and his outstanding work as the industry's representative on the Agricutural Chemicals Board. A number of senior members of the industry paid tribute to Mr Pearson's record of service, and the presentation was made by the President of the NBA amidst acclamation.

REPORTS

Reports on a variety of subjects were listened to with interest and attention by members of Conference, some of which are published in full or extract form in this issue. Pressure on space precludes all in entirety, but where possible, material held over will be published in the following edition of THE NEW ZEALAND BEEKEEPER.

NEW APIARIES ACT

With the consent of the Department of Agriculture, the General Secretary was enabled to give a resume of the principal changes in the Bill to be introduced during the current session of Parliament, and to representations which had been made by Executive for alterations or additions to some clauses deemed to be advantageous for the successful operation of the new Act.

It was emphasised that suggested alterations could be recommendations only, and that the Department and the law draftsmen would be the final arbiters in the matter. Appreciation was, however, expressed for the help and assistance which had been given to the Association in consideration and implementing requests for changes or amendments from original drafts.

GENERAL BUSINESS

Prior to the close of Conference a unanimous vote of thanks was passed to the host branch for the warmth of their hospitality and to Mrs C. Cunningham of Winton for organisation of the social arrangements.

A motion of thanks to the Chair for his conduct of Conference was met with acclamation.

BEESWAX

DO NOT SELL YOUR WAX UNTIL YOU SECURE OUR QUOTATION. AS THE COMPANY WHO PIONEERED THE EXPORT OF BEESWAX FROM NEW ZEALAND WE ARE CONTINUALLY IN TOUCH WITH THE WORLD'S BEST MARKETS.
WE ARE PAYING AND WILL CONTINUE TO PAY THE BEST PRICES POSSIBLE IN RELATION TO WORLD MARKET CONDITIONS.

WRITE FOR OUR CURRENT QUOTATION.

COMB FOUNDATION

DELIVERY CAN BE MADE WHEN REQUIRED. SEND YOUR WAX FOR CONVERSION NOW AND ADVISE YOUR DELIVERY REQUIREMENTS. EXTRA WIDTH FOUNDATION (x 8⅛") CAN BE SUPPLIED, ON REQUEST, AT NO EXTRA CHARGE.

COMBS RENDERING

TAKE ADVANTAGE OF CURRENT WAX PRICES BY SENDING US YOUR OLD COMBS, SCRAPINGS, SLUMGUM ETC. FOR RENDERING. WRITE FOR FULL DETAILS AND ADVISE THE QUANTITY INVOLVED.

A. Ecroyd & Son Ltd.

P.O. BOX 5056,
Papanui, Christchurch, 5.

Telephone: 526-044, Christchurch.
Telegrams: "Acorn" Christchurch.
Address: 25 Sawyers Arms Road,
Papanui, Christchurch, 5.

"The foundation of Success"

NATIONAL EXECUTIVE MEETS

BEFORE AND AFTER CONFERENCE

in DAY and NIGHT SESSIONS

Attention by Executive to business on the Order paper for Conference at Invercargill necessitated an early start on the Monday morning preceding the formal opening, and in view of the distance to be travelled from other parts of the North and South islands most members had to commence their journey on the nominal day of rest on the Sunday. The wisdom of this course of action in the interests of the industry was evident by the action of the one member who decided to make a 6 a.m. start from his home in Auckland but who remained fog bound until mid-day languishing with frustration and annoyance in the airport lounge. Whilst no names need be mentioned, the writer was appreciative to find that adequate notes had been taken by the General Secretary to enable assimilation of the day's business to be understood when eventual arrival was made on the evening of the same day.

NIGHT WORKERS

Executive worked late on the night of Monday, all day Tuesday until mid-night and a brief session prior to the opening of Conference on Wednesday morning. If any member of the industry should be sufficiently misguided to think that Executive meetings are brief and recreational, please accept the assurance of the ex-officio member that the time spent is solid hard work, exhausting, and sometimes frustrating. Fifteen-hour days are never refreshing.

It is of the utmost advantage to the industry that officials of the Departments of Agriculture and Horticulture, scientists from the Animal Research station and members of the Honey Marketing Authority can be received and problems discussed in confidence, for knowledge of the industry's problems from other sources is invaluable. Some of the information divulged cannot always be made public immediately, but the fact that there is provision for full and frank discussion is an asset that must be preserved.

Executive were pleased to receive Messrs. T. Palmer-Jones and P. Clinch from Wallaceville, Mr E. Smaellie, Superintendent, Beekeeping, Mr J. Fraser, Chairman of the Honey Marketing Authority, Messrs D. Lorimer, H. Cloake, J. Barber and E. Lee members of the Authority, and their General Manager Mr T. Edgerley, all of whom were able to make valuable contributions with their points of view and attitude to business on the Order paper.

In particular, Executive were enabled to put forward suggestions for further amendements to some phraseology in the new Apiaries Act, which will be drawn to the attention of the law draftsmen before the Bill is presented to Parliament later this session.

Following closure of Conference, the newly elected Executive met on the Thursday evening to enable members to review remits carried and lost at Conference, discuss problems and projects facing the industry and tentatively arrange for their next meeting probably in Wellington during October. Representatives for both North and South and the Chairman of Executive are the same hard working team as for the previous year, and their knowledge of existing circumstances within the industry will be of considerable assistance.

BEEWISE
PACKAGISE FOR 1969

1969 Package Bee Prices

	2 lb	3 lb	4 lb & 2 Queens
Oct. 1-7	$4.10	$4.80	$8.10
8-on	$3.40	$4.10	$6.70

(FREIGHT HAS NOT BEEN INCLUDED IN THESE FIGURES)

40c surcharge per cage refundable on return of cage in good condition.

To calculate freight use below mentioned weights and airfreight rate.

2 lb package including bees weighs approx. 6 lbs.
3 lb package including bees weighs approx. 7 lbs.
4 lb and 2 queen package including bees weighs approx. 8 lbs.

NOTE:- 4 lb plus 2 queen is a new system designed to save 30% of freight cost on two normal 2 lb packages, plus 40c for one cage. 2 lb packages build up to strength in 12 weeks provided a flow is stimulated with sugar and water syrup, where a natural early flow does not exist.

TERMS OF SALE:

50% Deposit 7 days before delivery. Balance on demand 7 days after delivery.

NO CLAIMS RECOGNISED UNLESS SHIPPER NOTIFIED BY PHONE WITHIN 24 HRS.

HAINES APIARIES LTD.

PACKAGE BEE SPECIALISTS

P.O. Box 284, Kaitaia — Phone 1228 Kaitaia

N.B.A. PRESIDENT'S REPORT to CONFERENCE at INVERCARGILL 1969

The past year has been a busy one. It has been our aim to keep members well informed and to attend to all problems as they arise.

There have been two very full meetings of Executive and as reports have appeared in the "N.Z. Beekeeper" on these meetings and details sent to all Branch Secretaries it is not necessary to elaborate further on matters considered by Executive.

BRANCH VISITS: During the year I have attended Field Days at Hawkes Bay, Auckland Central and the Waikato/Bay of Plenty combined Field Day.

At Hawkes Bay I was most impressed by the addresses dealing with pollination.

Auckland Central run a small apiary which belongs to the branch. Care of these hives is shared by members and income from the sale of honey help to boost branch funds. Other branches may find it well worthwhile.

Other Executive Members have attended Field Days and meetings whenever possible.

During the March Executive meetings members visited Wallaceville Animal Research Centre. We are indebted to Mr Trevor Palmer-Jones and Mr Pat Clinch for arranging this visit. It was with much interest that we viewed the various research projects being carried out.

1968/69 HONEY CROP: Except for Northland and parts of Hawkes Bay good to average crops have been harvested in most areas. It is pleasing to hear of better production from those areas which have experienced poor crops for some years, and we hope better seasons will continue. To those areas which had a poor crop this year I wish you well for next season.

BRANCHES: Branches have been active throughout the year in sponsoring meetings and Field Days. To Executive members of branches, and to all who contribute to such successful functions, the National Beekeepers' Association expresses its thanks.

SEMINARS: The Association, in conjunction with the Department of Agriculture, conducted a Seminar at Timaru last Spring. This Seminar was well attended and proved to be an outstanding success. I would like to extend thanks to the organising Committee and to those who gave addresses and demonstrations.

A Seminar in the North Island at Hamilton is being arranged for August, and we are hoping this Seminar will also be well attended.

JOURNAL: We are indebted to the many people who so willingly submit articles for the Journal and to our Editor, Mr L. W. Goss, for the excellent manner in which the material is prepared for publication. Income from advertising and subscriptions has continued at a very satisfactory level and the assistance received from the Honey Marketing Authority by meeting the cost of two issues has enabled this publication to maintain its reputation as a very useful and informative magazine for beekeepers both in New Zealand and overseas.

THE RESTRICTED ZONE: During the year an Apiaries Advisory Committee was formed with representatives from the Association and the Department of Agriculture to administer the use of the zone for queen bee breeding and bee feed purposes only. Most of you are aware of the outcome of the meeting held in Tauranga on April 1st and 2nd. I would appeal to beekeepers who propose to use

the restricted zone to study the Regulations thoroughly, and the Committee trusts that it will have your full co-operation. Do not jeopardise the use of the area which has taken many years of negotiation to achieve.

LIBRARY: I would urge members to make greater use of the books now available which contain a wealth of information on all aspects of beekeeping and can be borrowed readily through our Librarian, Mr Dawson at Timaru. I express the Association's thanks to Mr Dawson for the valuable contribution he is making through his work as Librarian.

NEW ZEALAND QUEEN BEES TO CANADA: Permits have been issued by the Canadian Department of Agriculture allowing the importation of New Zealand queen bees. It is very gratifying to hear that the first consignment of queens compared more than favourably with queens already in Canada. I congratulate the sender of this first consignment and say how fortunate we are to have a queen bee breeder of this standard who has been supplying our New Zealand requirements for many years. Further orders have since been forwarded to Canada from other breeders. We trust these will also return a favourable report.

At this stage it would be appropriate to mention that it is with much regret that we hear Mr Allan Bates, after twenty-four years in the business, will no longer be raising queen bees for the industry.

We are very conscious of the valuable contribution Mr Bates has made to the industry and we all wish him the best in the years ahead.

CONSOLIDATION OF APIARIES ACT 1927: Two years ago Executive requested that the Apiaries Act 1927 and its many Amendments be consolidated into a new Bill. During this time members of Executive have spent many hours both at meetings and at home going over drafts of the proposed legislation. Discussions have been held with officers of the Department of Agriculture, and it is now expected that during the present session of Parliament the Bill will be introduced. Branches will receive copies of the Bill as soon as this is permissible.

PLACE YOUR BEESWAX ON THE BEST MARKET

● **TOP PRICES and CASH BY RETURN** ●

R. N. SELDON . . . of— JOHN W. SHACKELFORD AND SON LTD.

Telephone 33-661

P.O. Box 5547 Auckland

WAX MAY BE DELIVERED TO ANY N.Z. EXPRESS DEPOT CONSIGNED TO US

H.M.A. ELECTIONS: The 1968 Conference accepted in principle proposals to amend voting qualifications in the Honey Marketing Authority Elections. These were duly publicised and proposals, together with a full report on the views expressed, were submitted to Government in January.

Mr D. J. Carter, M.P., Under-Secretary to the Minister of Agriculture, advised on May 23 that NO CHANGE will be made to the present voting qualifications.

Executive did not expect this result, as reports from all but one of the branch meetings were favourable to implementation of the new proposals.

My thanks to those beekeepers who expressed their views by writing to the Executive supporting or opposing the issue. We welcome correspondence of this nature when vital issues are being considered.

AGRICULTURAL CHEMICALS BOARD. We are fortunate to have such a worthy and capable member as Mr Tom Pearson who represents our industry on the Agriculture Chemicals Board. He has agreed to serve for a further term and the Association is indebted to him for his work on the Board since 1958.

HONEY MARKETING AUTHORITY: Throughout the year we have enjoyed a most excellent liaison with the H.M.A. The attendance of the Chairman, Mr Jack Fraser, at our Executive Meetings has been the means of keeping us well informed on matters relating to the industry.

An application was made to the Authority for an increase in the grant from the Seals Levy to enable the Association's activities to be maintained. The Authority has advised that the Regulations will be amended to allow the Grant to be increased by $300.

FINANCIAL: The Association's finances have been strengthened a little during the year due to increased income from magazine subscriptions and advertising. However, we must realise that costs are rising and that additional revenue must be forthcoming as the Association's resources are not extensive.

You will be aware that Conference is to give consideration to phasing out the Seals Levy. Executive members have given some consideration to the function and purpose of this Levy and are very conscious of the fact that almost two thirds of the Association's income will be derived from that Levy.

HORTICULTURAL PRODUCERS COUNCIL: The Association has been represented at two meetings of the Horticultural Producers' Council. The Council has reviewed requirements of various diploma examination conducted by the Royal Horticultural Institute of Agriculture, with a view to achieving wider recognition for diploma holders. The Diploma of Agriculture has not been reviewed as the Association is giving consideration to a Cadet Scheme.

APPRECIATION: On behalf of the Association I would like to extend to Mr Greig, the Director of Horticulture, our sincere thanks and appreciation for his valued assistance to our industry during this past year. Our thanks also to Mr Smaellie, Superintendent of Beekeeping and all other officers of the Apiary Section of the Department of Agriculture and Research Officers for their continued assistance and co-operation.

To all Executive members, the General Secretary and to Branch Officers I extend my sincere thanks for the work they have done during the year.

D. A. BARROW

Pat Gavin Ltd.

CABINET MAKERS
LAMINEX and FORMICA FABRICATION

Price List of Hive Woodware as at 20.4.69

SUPER

Full depth. Rebate corners. No metal rebates	0.50	$1.28 each
	50 & over	$1.22 each
Half depth. Rebate corners. No metal rebates.	0-50	$0.84 each
	50 & over	$0.80 each

FRAMES

Full depth Self spacing	10	$1.18
	100	$8.50
	1000	$78.00
Full depth Not self spacing	10	$1.10
	100	$7.70
	1000	$70.00
Half depth Self spacing	10	$1.05
	100	$7.50
Half depth Not self spacing	10	$1.00
	100	$7.00

SECTION FRAMES

Full depth	100	$8.50
	1000	$78.00
Half depth	100	$7.40
	1000	$69.00
Tin separators		0.24 each
Wood separators		0.10 each

LIDS

Without iron	10 or more	$1.00 each
Galv. iron covers	10	$0.65 each

BOTTOMS

	10 & over	$1.00 each

Please Note:

Supers and frames are machined for glue jointing. No nails required although nails can be used if required. Send $2.80 for a sample super and 10 frames. (Freight paid on sample.)
Terms 5% discount for cash with order. Charge accounts by arrangement.
For highest quality beeware at the right prices specify "Superior" products.

Pat Gavin Ltd.
TITOKI, WHANGAREI
PHONE 275 TITOKI.

Condensed Report on

AGRICULTURAL CHEMICALS BOARD

by NBA member Tom Pearson

The year has again been notable for the small amount of attention required in matters directly related to the welfare of beekeeping interests. One report only of pesticide damage to bees has been referred to me. In this instance some twelve hives in one apiary were reduced to almost a total loss. Extensive hormone spraying had taken place in close proximity to the apiary, but the precise cause of the damage could not be clearly established.

The Board's field of operation is very wide indeed, and I have endeavoured to fulfil my obligations by participating in its general work and affairs.

The Board's major task has been to lay down procedures on the use of organochlorine insecticides, in particular D.D.T., so that insecticide residues in our produce will not exceed established tolerances.

Risk of damage from hormone weedkillers is a perennial problem, and has become intensified in recent years by the spread of vineyard and market gardens into grassland farming districts.

The replacement as far as possible of organochlorine insecticides by organophorus materials, has increased the use of more toxic insecticides, consequently the Board has given considerable attention to the hazards associated with the use of these more dangerous chemicals, and has endeavoured to establish procedures designed to guard against damage and safeguard users.

Cases of Poisoning

Sixty-one cases of Agricultural Chemical poisoning were reported during the year. Most could have been prevented by reading the label and acting on the precautions recommended. One serious case resulted from the user stirring the spray mixture with his hand.

I would strongly recommend that you make a check of both full and partly used garden or farm chemicals you may have on hand. Store them all in one place, and ensure that they are well out of the reach of children, or irresponsible persons. Never transfer a chemical from its original labelled container to another vessel, and be sure to burn or bury empty chemical containers.

Education

New and more efficient agricultural chemicals have been developed so fast that instructions on labels are becoming more complex, and technical words and phrases increasingly necessary. Understanding of the terms used is vital to correct interpretation; not only of the directions, but also the precautions.

The Board, in association with the N.Z. Agricultural Chemical Manufacturers' Federation, has issued a glossary of words and phrases used in pest control, to assist all involved in the distribution, sale and application of pesticides, to understand and interpret correctly the necessary instructions.

The Effect of Hormones on Clover

A questioner at last years Conference in Hamilton asked for information regarding the effect on white clover of hormone applied for weed control. I am indebted to Mr T. Palmer-Jones for the following statement of particular interest to beekeepers.

"Two main types of hormone weedkiller based on M.C.P.B. and M.C.P.A. are used under various trade names for this purpose. The M.C.P.B. formulations have little effect on clover, but, unfortunately are more expensive than the M.C.P.A. preparations which may check clover for up to several months.

When M.C.P.A. preparations are applied in the autumn, affected clovers recover during the winter, but mid-spring spraying will have a serious effect from the beekeepers' point of view. A farmer, stocked to the limit, would prefer the more expensive M.C.P.B. preparations. One who estimates total growth will exceed stock requirements would use the cheaper preparations. If your organisation could persuade Federated Farmers to recommend in general, autumn spraying for weed control, and use M.C.P.B. when spring spraying is necessary, clover pasture would not be seriously affected."

Hive Timber Treatment

The maintenance of woodware in both large and small beekeeping outfits has long been a problem, especially in high rainfall areas. Existing procedures of painting or waxing prolong the life of timber, but the need for a more permanent timber preservation treatment, which would have no detrimental effect on bees or honey, has become increasingly evident.

The following information has been received from Hickson's Timber Impregnation Co. (N.Z.) Ltd:—

> Cee-Bee preservative has been specifically designed to give maximum protection to timber without causing harmful effects to bees. Following consultation with Mr Trevor Palmer-Jones for confirmation of his work on non-arsenic containing preservatives, it was decided to attempt to obtain the best combination of non-toxic chemicals available and the formulation of Cee-Bee is:—
>
> | | |
> |---|---|
> | Sodium dichromate .. .. | 40% |
> | Copper sulphate .. .. | 40% |
> | Boric acid .. .. .. | 20% |
>
> This means that there is fixation of the copper-chrome and the presence of boron will control the copper tolerant fungi. While there will be a gradual reduction in the amont of boron over a prolonged period and the preservative cannot be expected to have the same permanence as a fixed copper-chrome-arsenate such as "Tanalith" NCA, we are sure that Cee-Bee will greatly extend the life of beehive timbers.

There would of course be a cost factor in this type of treatment, but savings in maintenance and replacement, in the long term, could well make it a worthwhile proposition.

N.Z. Beekeepers are favourably placed

We could do well, from time to time, to take stock of the privileges and protection which we enjoy in comparison with our contemporaries overseas.

Visiting beekeepers from overseas are frequently our guests. I have yet to find one who is not envious of the measure of protection we enjoy in regard to the application of chemicals for pest control.

BEESWAX

BEST MARKET PRICES FOR PURE CLEAN WAX

CASH on receipt of Wax and Invoice.
Write NOW Stating Quantity available.

C. O. PRODUCTS LTD.

P.O. Box 7035
WELLINGTON
Telephone 88-199

REPORT from WALLACEVILLE to CONFERENCE — (*Abridged*)

Visit of NBA Executive

Executive visited Wallaceville on March 12, meeting the Director, Dr Buddle, and spending the morning with the Apiculture Section. Here we discussed our work with them and demonstrated the two biological tests for toxins in honey which depend on the guinea pig and mouse. Our visitors were shown laboratory tests designed to measure toxicity of agricultural chemicals to honey bees. They saw the experimental apiary where the effect on bees of agricultural chemicals is studied by wheeling large cages over treated plots of white clover on which bees are supplied from enclosed nuclei.

The visit was a great success. Such direct personal contact is invaluable to both the Apiculture Section and the beekeeping industry. Attendance of Mr. Palmer-Jones at meetings of Executive and at the yearly conference of the National Beekeepers' Association, is similarly essential for mutual understanding.

Residual DDT in Honey

We live in a residue-conscious world where the presence of only a few parts per million of an insecticide may lead to the rejection of a foodstuff. Although very large amounts of DDT have been applied to white clover pastures for the control of grass grub and subterranean caterpillar, the insolubility of this compound renders it unlikely to reach extracted honey via the nectaries in appreciable amounts. As a precautionary measure, we arranged for the Insecticide Section at Wallaceville to examine eight white clover honey samples, supplied by the Honey Grader, from typical producing areas in both Islands. DDT could not be detected in any of these samples. The present rapid decline in its use means the industry has nothing to fear from this possible source of honey contamination.

Export of Queen Bees to Canada.

Last April a shipment of 1400 queen bees was despatched by air to Canada. Prior to suppliers loading the queen cages with escort bees the Apiculture Section examined samples of bees from a range of hives in their apiaries. This ensured that escort bees could be provided from hives unaffected by **Nosema**, and so comply with Canadian requirements for an import permit.

Agricultural Chemicals

This project is a permanent one which absorbs much of our time. A constant flow of recently developed compounds, new formulations, and novel methods of application, continue to present us with problems which only laboratory and field tests can solve.

Dichlorvos Pest Strips

Early last year a beekeeper enquired whether it would be possible to use dichlorvos pest strips to prevent wax moths attacking stored combs. These strips, continuously release a small quantity of insecticide into the air. Dichlorvos is extremely toxic to bees, and it was thought possible that sufficient might be absorbed by the combs to render them toxic to bees.

Two tests were undertaken using several supers as a fumigation chamber. These showed that dichlorvos is absorbed by wax, and that combs exposed for four months to vapour from half the normal application rate, remained toxic to bees for four weeks. There are no visible signs that combs are contaminated.

The "New Zealand Beekeeper" published notes from us warning beekeepers not to use these strips where they could contaminate combs or honey. Reports have been received from the U.S.A. that bee losses have been caused by using these strips for wax moth control.

Field Trials

Because of the unpredictable nature of the weather, large-scale field trials to determine the toxicity of pesticides to honey bees are expensive and time-consuming. To reduce the necessity for these to a minimum, a new small-scale field test is being developed at Wallaceville. Nucleus hives of bees are enclosed in cages (30 x 10 x 6 feet tall) running in a track over an area of flowering white clover. Pesticides can be applied to plots of the clover by means of a trolley boom sprayer (specially constructed at Wallaceville). Observations and counts can be made in a manner similar to that used in larger trials. At the end of each test the cages can be moved over a new area. Initial results have been very encouraging and suggest that it may be possible to dispense almost entirely with large-scale field trials.

Pollination

Lucerne. We are engaged with other scientists in a national project aimed at increasing lucerne seed production. Our task is to deal with the beekeeping side of the work. The effect of irrigation, spacing of rows, and bringing up "waves" of hives during the height of the flowering period will be studied. All hives, with excess pollen removed, will have the maximum practicable quantity of young brood and young bees. These measures are claimed overseas to promote the tripping of lucerne florets by honey bees which is essential for pollination. Experimental crops are located at Tara Hills High Country Research Station and Earnscleugh, near Alexandra. We commenced this project last season at Tara Hills but, unfortunately, flowering and growth of the crop were too poor for us to make headway.

Brassicas. Work on brassica pollination is being continued in the Oamaru District. A study of the pollination of chou moellier (**Brassica cleracea**) is being concluded and will shortly be published.

Grasslands 4700 White Clover. The most important source of honey in New Zealand is white clover (**Trifolium repens**) which is also one of the most widespread and valuable pasture plants. The variety of white clover sown in pastures throughout New Zealand is Grasslands Huia. However, it is the responsibility of the D.S.I.R. to breed improved varieties of clover for the farmer, and associated with improved yield may be a decrease in flowering ability. Recently this Grasslands Division developed a new variety of white clover, Grasslands 4700, which we compared with Grasslands Huia last season as a source of nectar. Results would enable the effect on the beekeeping industry of its possible introduction to be assessed. A crop of each variety was compared from the viewpoints of flower density, honey bee density, sucrose content of nectar, degree of pollination, and bee behaviour while working florets. We concluded that both varieties of white clover appeared equally attractive to honey bees, and should 4700 be widely established there appeared no reason why its introduction should lead to reduced honey crops. An account of this work will be published in the "New Zealand Beekeeper."

Toxic Honey

The various factors which lead to the production of toxic honey cannot be correlated sufficiently for its occurrence to be predicted with certainty. However, this may eventually be possible if data is collected each season in the area restricted for beekeeping, and correlated with the results of tests. Field work is also necessary to assess the extent of danger areas, and to define the boundaries of the district restricted for beekeeping. Unfortunately, this project must be classed as a permanent one.

The testing of honey samples from experimental hives located in the restricted zone and nearby districts in the Bay of Plenty area was continued. A report on current tests will shortly be forwarded to the Director, Horticulture Division.

Replacement of Honey on Hives by Sugar Syrup

In the main honey producing areas of New Zealand about 40 lb of honey is left on a bee hive for winter feed, and about the same weight of honey often fed per hive in the late winter and spring, befor the honey flow. If cane sugar, fed as a syrup, could be used satisfactorily to replace this 80 lb of honey a considerable

saving per hive would be effected, assuming no extra expenses were incurred. Transport costs should not increase, and many beekeepers already possess equipment for preparing, transporting, and feeding sugar syrup, a practice common for short periods in the spring. The tendency towards larger hive holdings means that even a small saving per hive would amount to a large sum annually for a modern commercial producer.

There is a general feeding amongst beekeepers that cane sugar is inferior to honey for winter feed,' but no experimental work has been carried out in New Zealand which supports this view. Under our conditions hives might even benefit from sugar feeding. The object of the experiment is to find if a beekeeper would gain economically by replacing the honey left on hives for winter feed, and given in the spring, by sugar syrup. The experiment, which was commenced this autumn, is expected to take two years.

Evaluation of Methods of Swarm Control

This project has been completed and will soon be published. Mr. Forster will also discuss the results at the North Island Beekeepers' Seminar in August.

Four methods of hive manipulation commonly used for swarm prevention failed to reduce its incidence. Colonies with first year spring-reared queens made no attempt to swarm. The incidence of swarm preparation was less for colonies with first year autumn-raised queens, than for those with second year queens. Colonies that swarmed produced no surplus honey, and those that prepared to swarm, but were prevented from doing so, produced less honey than colonies that made no preparation.

Loss of honey through swarming was avoided by requeening with spring queens, or by clipping queens and destroying queen cells every fortnight. Loss of honey associated with swarm preparation was avoided by requeening with spring queens.

Effect on Honey Bees of Kowhai Nectar

The narcotic effect on bees of nectar from the yellow kowhai (**Sophora microphylla**) was again studied throughout the season, samples being collected in both Islands. This work should be completed in the coming season and written up.

Comparison of Honey Production from Hives Requeened with Locally Raised Queens, Mailed Queens, Clipped and Unclipped Queens

This project was commenced last season and interim results are being examined.

Comparison of Honey Production from Hives with First and Second Year Queens, Autumn and Spring Raised Queens, Introduced and Supersedure Queens.

This project was commenced last season and interim results are being examined.

'SUPERIOR' COMB FOUNDATION

COMB FOUNDATION—Latest Weed Process. Large stocks on hand. Beekeepers' own wax converted.

PULLIN'S APIARIES LTD.

29 Belfast Street, Mt. Roskill, Auckland. Ph. 656-950. P.O. Box 13052, Onehunga

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.

- **Branding pays, especially in CARDEA cartons because you can get bold striking designs which make your name stand out.**
- **With a distinctive design and a boldly displayed name, customers will be able to pick YOUR honey out AGAIN**

Frank M. Winstone (Merchants) Ltd.

71-79 Customs Street East, Auckland

SOUTH ISLAND REPRESENTATIVE: P. G. COLLINGS

33 Charlcott Street, Christchurch **Phone 516-062**

HONEY MARKETING AUTHORITY

CHAIRMAN'S REPORT — Mr J. Fraser

It is my pleasure and privilege to give an up to date account of the operations of your marketing organisation before you begin deliberations at this annual Conference, and I wish to thank Executive and branches for their co-operation throughout the year.

Members of the Authority are ready at all times to give such information as we have. The Order paper before Conference makes three references to this: I may say that if what producers have in mind are the kind of meetings held last year in Timaru and Okoroire, then we are very ready to participate, if the occasion arises.

The supply of honey to the Authorit's Auckland Branch, all depots and two South Island Branches for year to 30th June 1969 was 1898 tons. In addition, at 30th June 1969 the Authority contracted and paid for a pro-rata advance on a further 304 tons of honey held in producers' sheds, giving a grand total supply of 2202 tons entrusted to the Authority. This is a sizeable proportion of the Dominion crop.

In anticipation of this unusually high intake, the Authority was prepared, as early as January, to get the export programme under way. Unfortunately, we encountered unprecedented difficulty in getting shipping space, and this in turn had, toward the end of the period, the effect of placing strain on our financial resources; a strain, which I am happy to say, has been considerably relieved.

In May we had a flying visit from a principal of Kimpton Bros., our overseas agents, and in my absence from New Zealand, the Deputy Chairman, Mr Lorimer, and the General Manager, were able to make the best use of the short time his visit allowed.

Discussions on the spot were fruitful, and perhaps the most interesting point raised was the possibility of marketing N.Z. honey in bulk, under floral source labels, as we have been doing in retail packs. It is too early to say what will come of this, but it seems to offer possibilities in raising returns for those grades of honey which have traditionally been hard to sell at prices which offer a payable return to producers.

This is of particular importance as in recent discussions with Government on the questions of the Authority's finances, of which I will have more to say later, it has been made very plain that Government will not subsidize an uneconomic industry, nor an uneconomic part of an industry.

At this time, I can only say of our export returns, that satisfactory price levels are being maintained. Over most of our range of grades, N.Z. honeys continue to command the highest prices on world markets.

(For those who perhaps find them less than satisfactory, I might add that on a recent visit to the West Australian Honey Pool, the average payout to their suppliers was 6½ cents per lb — this in a year when we had guaranteed 14 cents).

Sales of the Authority's packs ex the Auckland factory, for the period under review were:

IMPERIAL BEE

	This Year Tons	Last Year Tons
Local	150	162
Export	36	28
	186	190

HONEYGOLD

Local	**46**	**101**
Export	**1**	**.63**
	47	**102**

SPECIALTY PACKS

Local	**95**	**96**
Export	**43**	**18**
	138	**114**

HONEYGOLD was reintroduced as soon as supplies of the constituent honeys were received. After the long absence from the market of this pack, following on last years poor crop, results to date must be considered good. However, additional promotion in the form of advertising would be desirable.

At last year's Conference I announced the ecquisition of two South Island packing plants to which we now refer as the Southern Branches.

In the period immediately following commencement of our operation of these two plants, volume of sales rose to a figure never exceeded under previous management, and very real difficulty was experienced in coping. On behalf of the Board, I publicly pay tribute to the very good work done by Mr Merritt and Mr Holland under conditions which were both novel and trying.

Sales from these two plants are as follows, for the period from takeover tc June 30th:

PLEASANT POINT: 555 Tons. HORNBY: 139 Tons. Total 694.

Arrangement of supplies to Southern branches has been comparatively smooth, the main difficulty being one with which everyone is happy to cope, consequent on a good crop. The Board's thanks go again to our branch managers, and to producers, for the co-operative effort needed to ensure smooth running.

A close watch has been kept on the quality of honey supplied to the branches, and regular spot grading checks have been made.

Practically all checks have revealed a grading of 100 points. On the few occasions when this was not the case the producer was notified that his honey was allocated a lower number of pay-out points. Some special types of honey were rejected and straight purchase prices offered.

During the year, the Authority has given its operations, and particularly its financial structure, very careful scrutiny. We have examined carefully the possibility of moving into more economic and suitable premises in Auckland. I say this, in no way being critical of those responsible for the establishment of the Parnell factory, but it is a fact that under present conditions, this building is less than ideal for our purposes. However, real estate and building cost conditions are such that we could not make an economic transfer to new premises. We are continuing in our present building, but keeping the situation under constant review.

The large intake this year, together with the delay in starting our export flow, due to shipping space difficulties, threw a very great strain on our financial resources. Following discussions with the Minister of Finance this has been relieved. Our overdraft limit has been increased by more than one third, subject to periodic reduction to the previous level.

Perhaps the most important point about the additional credit is that it is charged at a commercial rate.

In these discussions, as in other matters, I would like to pay tribute to the help and interest of Mr Carter, the Under-Secretary to the Hon. Minister.

The New Zealand Honey Marketing Authority today is a very big commercial concern and your Board is doing its best to run it on a business-like basis.

Finally, a word on another matter featured on your Order paper — the seals levy.

It would be pointless in 1969 to trace the history of this levy, introduced in 1938, nor detail the various interpretations which have been placed in its incidence and its use. The Canterbury Branch perhaps best sums it up when it refers to the levy as an Industry Fund, and its disbursement by the Authority is clearly shown in the Authority's Annual Accounts — despite the Ministerial correspondent who claimed that the H.M.A. refused to account for it.

There can be no doubt, under present free market conditions, who pays the levy: It is collected by packers of retail containers and its importance is recognised by the Authority in crediting to the seals levy account a sum equivalent to a levy on our retail packs (We are, of course not liable for the levy, but, I repeat, we are crediting the levy account with an equivalent amount.)

The question undoubtedly will be asked: what is the justification for the continued payment of the levy.

The Authority is largely bound to accept all honey offered to it, and we do in fact receive large quantities of honey of a type not generally acceptable to the retail trade, and certainly not handled in quantity by those supplying this trade.

The processing and blending of these honeys, to raise their sales value, is an important factor in the overheads met by the Auckland plant, to which these honeys come from all over New Zealand.

Without the assistance of the levy, these costs would be a direct charge on the pool, with a consequent reduction in returns to producers.

We must also remember the vital roll played by the Authority in the marketing overseas of honey, surplus to New Zealand internal requirements. If this were not carried out in the national interest on a equitable basis and the surplus remained on the local market there is not doubt that the overall return per pound of honey, received by the producer, would be much less. In fact, chaotic marketing conditions could result.

Canterbury are right — this is an industry fund — let us not throw it away, to a point where we could be accused of doing nothing to help ourselves.

Mr Chairman, we meet in a very different climate to our conference last year.

The Authority has done all that it said it would do, after those very valuable cosultative meetings we had with producers in both islands. We have had our difficulties. Some, like the supply of containers, not of our making. We would like to thank producers for their co-operation, and in some cases, forbearance.

We have another year's experience behind us; next year we hope we can all do even better.

ECROYD'S 'ACORN' WEED PROCESS COMB FOUNDATION

Good stocks of Medium Brood and Full Depth
Thin Super now on hand.

Obtainable from

T. R. W. NICHOLAS

235 Te Atatu Road **Te Atatu South** **Phone 1314**

(Railway Station, Henderson)

PENROSE

UNCAPPING MACHINES

NOW Two models to choose from:-

1. **MANUAL** — proven in use throughout N. Zealand.
2. **FULLY AUTOMATIC.**

Both these machines are available for the coming season, manufactured to last a lifetime by Hitchcox and Lawson of Timaru.

If you wish to buy a manual machine this can later be converted to fully automatic.

Machines will be delivered in rotation of receipt of order, and so you would be advised to order as soon as possible to ensure early delivery.

For further details contact the sole New Zealand agent —

D. PENROSE

R.D. 3

CHRISTCHURCH

A SIMPLE METHOD OF DRYING CAPPINGS FOR SMALLER BEEKEEPERS

Devised by K. N. Bates and Phil Muir

The method of drying cappings in the Auckland area by the smaller beekeepers is rather crude. Their system of placing the wet cappings in a lid or just on the ground in the apiary and allowing the bees from their own and neighbouring hives to take up the honey from the cappings is wasteful, dangerous and wearing on the bees.

If for no other reason than the risk of spreading disease the practice should be deplored.

The simple method described here will ensure dry cappings for rendering down into beeswax without risk of any kind.

All the honey from the cappings is, of course, available to the hive used for the purpose.

Materials Required

2 Standard Hive Supers

4	pieces	of Timber	18" x 1" x 1"
2	,,	,, ,,	12" x 2" x 1"
2	,,	,, ,,	12" x 1" x 1"
2	,,	,, ,,	15⅞" x 1½" x ⅜"
1	,,	,, ,,	13½" x 1½" x ⅜"
1	,,	,, ,,	14⅛" x 7½" x ⅜"
1	,,	,, ,,	14⅛" x 4½" x ⅜"

1 piece of Hardboard or 3 ply 16¼" x 14⅛"

1 piece of ½" or ¾" wirenetting 21½" x 17½"

2" Flat Head Nails and Small Staples ¾"

Making Up

1. The frame surrounding the wire netting is made from two pieces of timber 18" x 1" x 1" and 12" x 2" x 1". The longer pieces are butt nailed onto the shorter ones. It may be advisable to drill two holes in both ends of the 18" x 1" x 1" pieces to avoid splitting the timber.

When the frame is made up it is covered with the wire netting cut to size (Fig. 1) and folded down the sides of the frame and carried underneath and secured with small staples.

The next step is to use the remaining two 18" x 1" x 1" pieces of timber which, together with the two pieces 12" x 1" x 1", are nailed around the inside of one of the supers but not quite flush with the bottom. These strips are the supports to hold the wire netting covered frame on which the cappings are placed.

CONSTRUCTIONAL PLAN

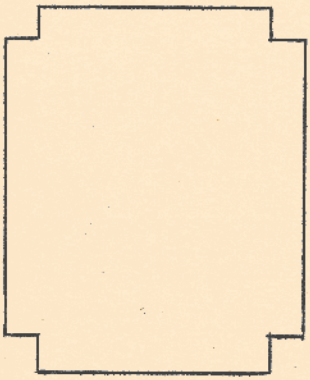


Fig. 1.
PLAN FOR CUTTING WIRE NETTING

Overall dimensions: 22" x 18" wide. Recesses 2" deep. (18" x 14" between each).

Fig. 3. Length 14¼" x 4½" wide x 3/8" deep. Bevel slightly to give downward slope.

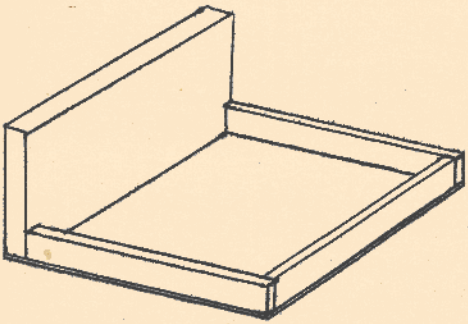


Fig. 2. Overall 16¼" x 14¼" wide, 3/8" timber. Height at rear 7½". Depth of side pieces 1½".

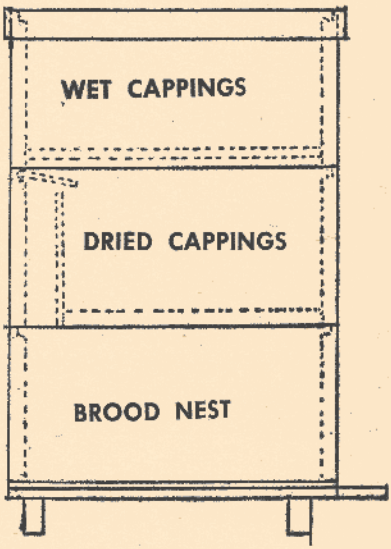


Fig. 4.

2. The container to receive the dry cappings (Fig. 2) is made from hardboard or 3 ply 16¼" x 14⅛" which is nailed on to two 15⅞" x 1½" x ⅜" and one 13½" x 1½" x ⅜" piece of timber. The result is a three sided box 1½" high with ⅜" of hardboard or 3 ply protruding to which the 14¼" x 7½" x ⅜" piece of timber is nailed both through the bottom and on to the 1½" strips.

OPEN VIEW OF DRIER

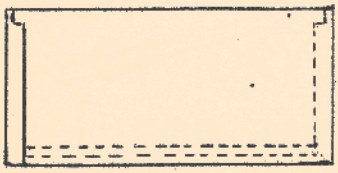


Fig. A. Wet cappings are placed in box. Wire netting on frame is at base. Wire held by cleats.

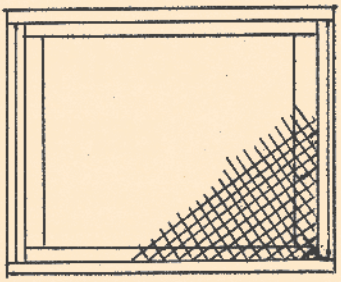
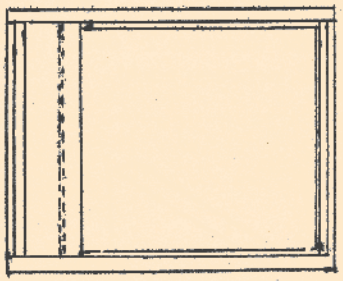


Fig. B. Frame for ½" wire netting to fit inside super. Wet cappings rest thereon.

Fig. C. Bottom super to collect dried cappings.

Fig. D. (Right). Hard board or 3 ply base of super on which rest dried cappings.



When completed, the container is nailed to one end of the inside of the second super (through the 1½" strips) but not quite flush with the bottom.

3. The next step involves bevelling slightly the 14¼" x 4½" x ⅜" piece of timber (Fig. 3) which is nailed flush with the top edge of the super on to the frame rebate giving it a downwards slope. There must be ample bee space between this and the top of the 7½" strip.

How to Operate

The super with the Hardboard or 3 Ply bottom is placed directly above the broodnest or honey super. The box containing the wet cappings is then placed in position (Fig. 4). The bees are attracted up from below into the honey saturated cappings which gradually dry as the honey is consumed and fall into the container below from which they can be removed in a suitable condition for rendering down.

WANTED TO BUY

BEEHIVES — Anywhere in the North Island.

OLD COMBS & SLUMGUM — Our pressing plant can handle 1000 boxes of combs a week. Turn those old brood combs into cash while wax prices are high.

BEESWAX — We export to the U.K., Japan and the United States.

KELLEY BOOM LOADER — An additional loader is required, must be in reasonable order.

Please write to:

ARATAKI APIARIES LIMITED

P.O. Box 16,

HAVELOCK NORTH.

or phone

77-300 Hastings office hours

78-772 Hastings after hours

BEEKEEPING in NORTH AMERICA

The first of a two-page report by G. M. Walton, Apicultural Advisory Officer, Department of Agriculture, Palmerston North.

Right: Paper wrapped hives in Canada. Colonies can tolerate wide temperture fluctuations with little or no protection if they are strong and provided with sufficient stores of food.

PART 1: PRACTICAL METHODS

Introduction

In August, 1966, I was awarded a Departmental post-graduate bursary for the study of apiculture at the University of Guelph, in Ontario, Canada. I took the opportunity, in my 23 months overseas, to visit a number of leading beekeepers, honey packing plants, equipment manufacturers and research stations. In this, the first of a two-part report on North American Apiculture, I will discuss some of my impressions of practical beekeeping and honey-handling methods, and will attempt to compare and contrast these methods with those in New Zealand.

Beekeeping, like other agricultural industries, is markedly affected by the physical factors of climate (particularly temperature, rainfall, and wind velocity), topography and soil. It is thus a difficult matter to generalize about practical beekeeping methods that may vary from the arid desert conditions of South West U.S.A. to the near arctic conditions experienced in the Canadian Prairie Provinces. If a comparison is needed, New Zealand climate in North American terms would best be described as a mixture of the mild winters of the Southern States and the moderate 60-80 degree temperature of an Eastern Canadian summer.

Beekeeping is also affected by the various methods of land use. For the beekeeper who has accepted the vagaries of climate and land utilization and would like an improvement in total honey yield, then this improvement would be up to himself. The beekeeper has full control over the form of bee management that he employs.

Hive Management

I feel that we, in New Zealand, can learn from the North American beekeepers some of the sound principles that they have applied by carefully studying the biological and economical aspects of colony development and honey production. The beekeepers of the prairie provinces of Canada, for instance, experience a winter so severe that it is more economical to kill the colonies with gas in the autumn and start afresh in April (equivalent to our October) with 2 lb, 3 lb or

4 lb packages of bees obtained from California and other southern states. Yet, even after an initial decrease in worker numbers and often with inadequate early spring pollen and nectar sources, the beekeeper has his colonies at a strength in late June sufficient to take the full benefits of the main nectar flow. How do these beekeepers do it? Simply by understanding the requirements of the colony and with supplementary syrup and pollen feeding.

When considering a hive, we are not dealing with a stack of blocks which require periodic re-arrangement. We are concerned with a live unit organism — the colony, made up of thousands of individuals — honeybees. Man has not tamed the honeybee, but he has been able to make it serve his needs through a knowledge of its behaviour and through adapting his practices accordingly. He encourages a fast spring build-up, without swarming, and a plentiful honey-yield, without robbing. Unmanaged or "wild" colonies seldom produce surplus quantities of honey but with intensified single-queen management, under the same nectar producing conditions, yields in excess of 150 lbs could be expected. Two-queen colony management may often result in a hive producing more than twice as much honey as that produced from a single-queen unit.

A knowledge of district floral sources enables the beekeeper to establish suitable apiary sites as well as to gear his whole management programme. Local floral information influences the beekeeper in making increases, requeening, supplementary feeding, supering, swarm control measures, honey removal and the wintering of colonies.

New Zealand beekeepers have heard much about the North American package bee industry. Package bees are usually used to start new colonies, but may also be used to replace colonies lost in winter, strengthen weak or queenless ones, or make a rapid increase in colony numbers. A system of killing colonies off in autumn and starting afresh with package bees in spring would be impractical in New Zealand. Ontario experiences a winter that is far more severe than in any part of New Zealand, but it has been found there that strong overwintered colonies will always produce more honey than colonies established from package bees in the spring. Almost all hives in Ontario are overwintered. However, package bees are a necessity in the prairie provinces and in some of the Northern States due to an even more vigorous and prolonged winter.

Even with tougher winter conditions, and with fewer and later spring sources of pollen and nectar compared to New Zealand, these beekeepers can build up their colonies to a strength sufficient to take full advantage of the main summer nectar flows. Adequate feed at all times is essential for the development of these colonies. Honey or sugar syrup together with pollen supplement feeding occurs in periods of dearth. Supplements incorporating natural pollen are more attractive to bees and give better results than the substitutes soya bean flour, dried skim milk, or brewer's yeast, without the pollen added. Although many areas in New Zealand have an embarrassing surplus of pollen some open areas of pasture land do not. Even if a district may be well endowed with pollen sources during the critical spring build-up period, our temperamental spring weather may prevent bees from gathering adequate supplies. Feeding of pollen supplements is a useful method of overcoming these deficiencies.

Higher yields per colony can be obtained by better management. Before a beekeeper contemplates expanding his outfit he should ask himself, "am I using each of my existing colonies to its maximum potential?"

Mechanisation

Just as the introduction of a milking-machine has saved many a weary back-breaking hour for the dairy farmer, new machinery in the beekeeping industry has proved to be a saving of time, energy and money. But it must be remembered that it is not the milking-machine that produces the milk, nor the uncapping machine that produces the honey. Mechanisation provides the beekeeper with more time in which to intensify his management methods, expand his hive holdings, or time with which he could divert to other pursuits. To accommodate new equipment a beekeeper may need to change his existing methods. To efficiently operate an uncapping machine, for instance, a steady, sufficient supply of honeycombs is required, together with an extractor (or extractors) and a cappings reducer efficient enough to keep pace with the uncapper.

The basic shape of the hive has altered little in the last 100 years; it allows the development of a strong colony and the production of a large honey crop. Future designs may make the hive more amendable to labour saving manipulations, but modifications will be limited by the behaviour of the bees themselves.

North American beekeepers frequently shift their colonies to take advantage of differing nectar flows and to provide pollination services. Many mechanical devices are available to load and unload colonies and supers. Hydraulic tailgates fitted to trucks, forklifts and boom hoists are often used by the larger commercial men. More often than not bees are removed from the honey supers using chemical repellents and blowers. Pallets on the truck and about the honeyhouse speed-up super transfer.

Honey Handling

Large quantities of honey in North America are sold in bulk, usually to co-operative marketing organisations. I met only one commercial beekeeper, operating 1,000 colonies, who packed and marketed his own crop. New Zealand has many producer packers and the quality of their product is generally high by world standards. The packer must continue to meet the demanding standards of hygiene and grade if consumer acceptance is to be met.

The design of the honeyhouse and layout of equipment within contributes significantly to the overall efficiency of a beekeeper's total operation. There are many methods in use in North America for removing the cappings from the comb cells. The hand knife and the hand plane are the favourites among beekeepers with fewer than 700 hives. Uncapping machines, using jiggler knives, vibrating knives, rotating blades or perforating rollers, are widely accepted by the larger commercial men. Extractors have been developed to handle frames that are being uncapped at nine frames a minute. Fully automatic extractors are now available that can centrifuge honey, within 15 minutes, from up to 102 frames per load. Separating the honey and wax from the cappings can be done in a number of ways. New Zealand commercial beekeepers almost exclusively use a cappings melter which, when operated properly, can separate the honey with little damage to its colour, flavour or grade. Other methods involving centrifuging and pressing may remove much of the honey in cappings without the use of heat. A wide range of honey handling equipment is available in New Zealand. Our difficulty in extracting manuka honey, due to its thixotropic properties, almost dictates the type of equipment needed in some areas. A beekeeper's choice of equipment should be governed by the existing and future size of hive holdings and honeyhouse, existing equipment, and the cost and availability of labour.

In Canada most honey is processed and packed by the provincial honey co-operatives. I visited the Ontario, Manitoba, and Saskatchewan Honey Co-operatives while overseas. These plants are larger than any plant in New Zealand. The Manitoba Honey Co-op can almost process and pack the equivalent of our total honey crop. Honey handling methods are obviously large on our standards. Such equipment as O.A.C. pressure strainers, APV plate heat-exchangers, and votators are used in the processing of a product that may finally be labelled as pasteurised and homogenized honey. Whereas most retail shops in Canada sell only a limited variety of honey (mostly as blended honey), New Zealand grocery shops generally offer the consumer a variety of honey types. This may well be one of the reasons why New Zealand has a higher per capita consumption of honey.

General

New Zealanders have a reputation for a "do it yourself" attitude. Some beekeepers may prefer to construct and experiment with their own equipment. But time and trial and error may prove to be costly. Much useful information has been gained by research that could be applied to this country.

The industry in New Zealand could and should capitalize on world apicultural experts. One such expert, Dr Eva Crane, Director of the Bee Research Association, made a six weeks tour of Australia in late 1967 at the invitation of the Australian Honey Research Advisory Committee. The purposes of this visit included a study of Australia's need in bringing the results of research in apiculture throughout the world to practical honey producers, and to list aspects of Australian methods and research which she felt was of most importance. In her report on the visit Dr Crane said, "in general I found a great lack of awareness of current (or even past) research that could help the industry". This finding may hold for the New Zealand industry as well.

In the second part of my report on apiculture in North America I will discuss recent research and research trends in Canada and the United States.

BEEKEEPERS TECHNICAL LIBRARY

MAGAZINES

Your Library has some copies of the following magazines available on loan — 10 magazines for a month for 20 cents.

BRITISH BEE JOURNAL
SCOTTISH BEEKEEPER
BEEKEEPING (Devon B.K. Assn.)
IRISH BEEKEEPER
AMERICAN BEE JOURNAL
BEE CRAFT (British B.K. Assn.)
AUSTRALASIAN BEEKEEPER (Aust.)
APICULTURE (Western Australia)
APIACTA (International)
GLEANINGS (American)

★ ★ ★

BOOK WANTED. The library would like to secure a copy of the book **'BEEKEEPING IS MY BUSINESS'** by Whitcombe. Please advise if you have a copy to donate or sell.

★ ★ ★

THANKS. Thanks to beekeepers who so kindly supplied copies of "THE N.Z. BEEKEEPER" missing from our files. We still need one copy of November 1964. Thanks also to those who returned books that were overdue.

★ ★ ★

CHRIS DAWSON,
Hon. Librarian, P.O. Box 423, Timaru.
List of Library Books and rules available on request. Loan Fee 20 cents for one book for one month.
(Including postage).

BOOK REVIEW

"BEEKEEPING IN ILLINOIS" by Associate Professor of Apiculture ELBERT R. JAYCOX is a useful and interesting publication similar in format and content to BEEKEEPING IN NEW ZEALAND. The author is at the University of Illinois, and the booklet was published in co-operation with the US Dpartment of Agriculture for the benefit of beekeepers in general and the beginner and hobbyist in particular.

Profusely illustrated and with clear and concise text, it is a little disappointing that greater detail is not given to some all-important operations as, for example, the operation of embedding wires into comb foundation in the chapter on BEEKEEPING EQUIPMENT. The reader is told . . . "for large numbers of frames, use an electric embedder with a resistance coil to heat the wires so they sink in the wax (Fig. 20). Use it briefly and carefully at first to avoid cutting the foundation into strips with overheated wires, or melting the wax where wires cross".

If the reader was an enthusiastic beginner, thirsty for know-how and practical knowledge, it would be frustrating in the extreme to read that there was a better and faster way and not be told how to produce the simple equipment to carry out the job. Even for the hobbyist with three or four hives, an electric embedder is a 'must'.

It is always easier to criticise than it is to praise and sight must not be lost of the fact that this new booklet is a valuable and welcome addition to bee literature, and is the provender of sound advice.

NEW VARIETY OF CLOVER
(Grasslands 4700)
ATTRACTIVE TO HONEY BEES

By T. Palmer-Jones and I. W. Forster,
Department of Agriculture, Wellington.

Introduction

The most important source of honey in New Zealand is white clover (**Trifolium repens**) which is also one of the most widespread and valuable pasture plants. The variety of white clover sown in pastures throughout New Zealand is Grasslands Huia. However, it is the responsibility of the Grasslands Division of the Department of Scientific and Industrial Research to breed improved varieties of clover for the farmer, and associated with improved yield may be a decrease in flowering ability. A new variety of clover might flower for a shorter period, or bear nectar less attractive to honey bees. Obviously it would tend to be judged on its performance as a pasture plant, rather than on its qualities as a nectar producer, unless it were so unattractive to bees that it was difficult to pollinate for seed.

Recently the Grasslands Division developed a new variety of white clover, Grasslands 4700, by crossing selected plants of a Spanish form of white clover with elite plants of Grasslands Huia. Sufficient seed of Grasslands 4700 is now available for both Grasslands and the Department of Agriculture to arrange trials throughout the country on their experimental stations and also on private farms.

Tyrer (1968) reported that Grasslands 4700 appeared to give more extended seasonal growth than Huia and, at least in some North Island districts, grew vigorously into the winter when growth of Huia had almost ceased. The new strain might, however, be somewhat more difficult to establish than Huia under South Island conditions. Grasslands 4700 appeared well suited for some situations, particularly in the North Island, and might eventually appear, after further trials, on the commercial market.

Development of Grasslands 4700 was judged to have reached a stage where it was desirable to compare it with Huia as a source of nectar. Results would enable its effect on the beekeeping industry to be assessed.

EXPERIMENTAL AND RESULTS

Observations were carried out for a week, commencing on 29 December 1968, on an isolated seed crop of Grasslands 4700 located on a farm near Outram. A seed crop of Grasslands Huia on a nearby farm provided a control. Both crops were second season ones.

An apiary of eight hives was located on a corner of the 4700 crop and one of 25 hives was within half a mile of the Huia crop.

On the farm with the Grasslands 4700 seed crop this variety and Grasslands Huia had been sown the previous season in six alternate strips (56 x 198 ft). These strips were grazed by sheep, except for two areas in each (5 x 11 ft), protected by enclosures, where the clovers were mown at intervals during the flowering period, the mowings being removed for nutritional estimations. Elsewhere on the farm eight enclosed plots (6 x 30 ft) of each strain of clover, sown two seasons previously, were treated similarly. These trials were conducted by officers of the Invermay Agricultural Research Centre, Mosgiel.

Flower density. Because the density of white clover flowers per acre is a factor affecting the amount of nectar available to foraging bees we used a standard counting technique to estimate flowers per acre in these strips and enclosed plots, as well as in the seed crops.

Flowers per acre in the six enclosures averaged 764,000 for Grasslands Huia, and 316,00 for Grasslands 4700, shortly after mowing (on 29 December 1968). Six days later they had increased to 1,065,000 for Huia and 477,000 for 4700. Flowers per acre in the grazed strips surrounding the enclosures were, on the average, twice as high for Huia as for 4700, after grazing had been discontinued for a week. In contrast, flowers per acre for the enclosed plots sown two seasons before varied little, averaging 78,000 for Huia and 68,00 for 4700.

At their peak flowers per acre were 1,357,000 for the Grasslands Huia seed crop and 730,000 for Grasslands 4700, falling to 1,306,000 and 615,000 respectively, six days later (on 4 January 1969).

Honey bee density. Counts made under conditions suitable for maximum activity on five consecutive days averaged 1,300 honey bees per acre on the Grasslands Huia seed crop, and 1,900 on the 4700 one. No bumble bees were observed on the crops. Expressed as honey bees per 10,000 flowers the figures were 10 for Huia and 28 for 4700.

Sucrose content nectar. The sucrose content of nectar in the two seed crops was obtained by transferring the contents of bees' honey sacs to the prisms of pocket refractometers, and taking readings. Ten bees were collected at random during visits, and results averaged. There was no significant difference between the crops, Huia averaged 61% sucrose (10 x 4 readings and 4700 58% (10 x 3 readings).

Degree of Pollination. This was expressed as the percentage of florets that had seeded, being based upon dissection and examination of seeded flower heads collected at random in the two seed crops. Percentage pollination was 74 percent for Huia and 92 percent for 4700. Bees per acre, and bees per 10,000 flowers, were at optimum concentrations for pollination of 4700, hence the high figure, while they were somewhat low for Huia **(Palmer-Jones et al. 1962).**

DISCUSSION

Grasslands 4700 appears, as suggested by Tyrer (1968), slower to establish itself than Huia, at least in the South Island. Consequently it would provide fewer flowers per acre for honey bees during at least the first season following sowing.

Honey bee density on 4700 flowers was about three times that on Huia, and seed set was correspondingly greater. This was due to the apiary serving the 4700 crop being alongside it, while the one serving Huia was half a mile distant; greater competition from clover in pastures for Huia than for the relatively isolated 4700 crop; and fewer flowers per acre for 4700.

Palmer-Jones et al. (1962) have shown that for adequate pollination 2,000 bees per acre, or 25 bees per 10,000 flowers is ample for white clover. These requirements were met on the 4700 clover which bees worked vigorously even under adverse weather conditions. Adequate pollination of this strain is as straightforward as that of Huia.

Sucrose content of nectar varied little between both varieties of clover, and they appear equally attractive to honey bees which worked florets in the same way. Should 4700 be widely established there seems no reason why its introduction should lead to reduced honey crops.

ACKNOWLEDGMENTS

We appreciate the co-operation of Mr R. J. Reid, Traquair, Outram, on whose farm the Grasslands 4700 seed crop and plots were located, and his brother, Mr K. Reid, on whose farm the control crop of Grasslands Huia was situated.

We are grateful for the help of officers of the Invermay Agricultural Research Centre, Mosgiel, and Mr Alan McKellar and other Farm Advisory Officers of the Department of Agriculture, Dunedin.

Mr R. H. Hobbs, Apiary Instructor, Department of Agriculture, Gore, assisted us to locate the experimental sites.

REFERENCES

PALMER-JONES, T.; FORSTER, I. W.; JEFFERY, G. L. 1962: Observations on the role of the honey bee and bumble bee as pollinators of white clover (**Trifolium repens** Linn.) in the Timaru district and Mackenzie Country. **N.Z. Jl. agric. Res. 5:** 318-25.

TYRER, T. G. 1968: Grasslands Division plant breeders exploited Mediterranean gene pool in breeding promising new hybrid clovers and fescue. **N.Z. Dairy Exporter 44:** (3) 10-17.

HONEY MARKETING AUTHORITY

STOP PRESS: ELECTION NOTICE

There will be four candidates offering themselves for election as Producer Representatives at the forthcoming Election.

They are:

JAMES RICHARDS BARBER
HARRY CLOAKE
RUSSELL FREDERICK POOLE
DUDLEY LAWRENCE WARD

The Poll closes at noon on September 10, 1969.

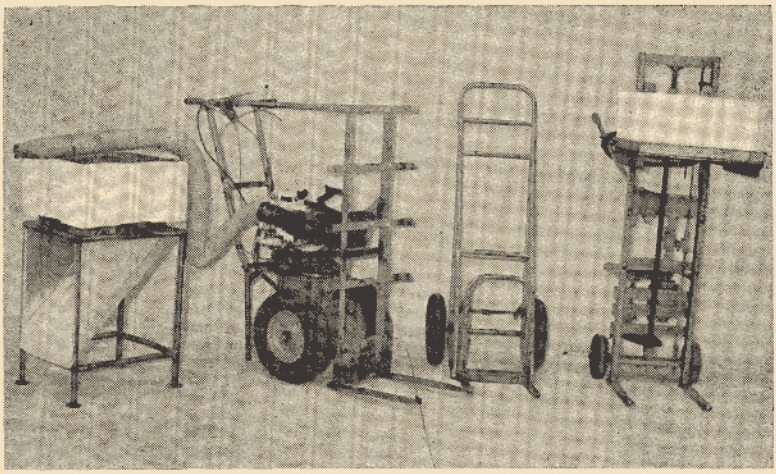
CURRENT PRICES
for
BEESWAX

If you have pure, clean beeswax take this opportunity of cashing in on today's top market prices.

Don't delay — write to us stating the quantity available NOW

SHARLAND & COMPANY LIMITED

Taylors Road, Morningside, AUCKLAND
P.O. Box 859 Auckland, Telephone 84-009, (Factory Division)



"WARD" QUEENS, BLOWER, LOADER, HAND BARROW & HONEY HOIST

QUEENS. For my two queen sytsem I raise a number of early spring queens. On completion of this work from 1st November to end of April I will have a limited number of queens for sale at ruling rates.

BLOWERS: During the past season I have increased the power with 4 h.p. motor and incorporated a clutch so that the motor is not starting under load. Also attached is a telescopic device for holding the hose in ready position which is a great time saver. The deflector shute is spring loaded and bees can be deflected to the left or right of the operator. This is a robust unit and should give years of trouble free service.

MOTORISED BARROW. Still the same barrow with two forward speeds available and reverse. Blower can be fitted as extra attachment.

ELECTRIC HOIST. Automatically raises supers to a pre-set level for uncapping (save that back!). Can be used as fork lift for stacking honey on pallets in hot room or to conserve space in honey house. Will lift 400 lbs.

HAND BARROW, Light tubular steel hand barrow with adjustable forks on 16 x 4, 14 x 3 or 12 x 2 tyres. Ideal in the honey house or field.

DUDLEY WARD

KINTAIL APIARIES **47 GUY STREET, DANNEVIRKE**

COMMENTARY from the Editor's Desk and Mail

COMMENT WAS MADE in the August 1968 issue that the then current issue of APIACTA had been received but that the composite picture of the world on the front and back covers did not include an outline of New Zealand; in fact, we had been swallowed up in the vastness of the ocean. The reference was only made in fun, of course and was not intended to be serious. The busy President of APIMONDIA however, took the time and trouble to write and apologise for the ommission, and the new edition of APIACTA just received clearly shows little old New Zealand as part and parcel of the geographical scene in this part of the world. Our thanks to Professor Dr. V. Harnaj of Roumania for his courtesy and the trouble taken in rectifying the small error. It is hoped to publish some of the interesting and valuable data from APIACTA in THE NEW ZEALAND BEE-KEEPER for our general interest.

★ ★ ★

A PROSECUTION of interest to all beekeepers was made by the Department of Agriculture at Huntly Court for infringements of the Apiary Act, in which it was alleged that hives of diseased bees had been transferred from site to another. The prosecution was successful.

Allan Waldemar Hansen of Orini was charged before Mr E. S. Tuckwell, SM, in that he transferred three colonies of diseased hives from his apiary at Karaka to Orini, and from Orini to Glenbrook.

He was also charged with exposing diseased combs and appliances which had not been sterilised, but the magistrate held that there was no evidence to prove that defendant had caused such exposure and dismissed that charge.

Hansen pleaded guilty, however, to the charge of transferring bees from Orini to Glenbrook, a distance in excess of 10 chains, as provided in the Apiaries Act 1927.

The Department of Agriculture was represented by Mr R. C. G. McDermott who conducted the prosecution and Mr P. Bennett represented the defendant.

Mr K. N. Bates, the apiary inspector for the district, said in evidence that he had inspected the diseased hives at Karaka on September 19, 1968 and said that in a subsequent interview with Hansen, defendant admitted moving the hives to his property at Orini.

After listening to evidence by Hansen on his own behalf, the magistrate said that he accepted the evidence of the prosecution and convicted defendent on both charges, imposing a fine of $15, with court costs of $5 and solicitor's fee of $10 on each count.

On the charge to which defendant had pleaded guilty, a fine of $15 was imposed, with court costs and solicitor's fees of $15.

AUSTRALIA is reported to be successfully marketing jellied honey, which is a mixture of fruit pectin and honey that is not sticky and does not run when spread on bread. Development has been at the laboratories of Maurie Bros. and Thompson, Sydney, NSW.

★ ★ ★

A REPORT from the UK gives renewed hope to beekeepers that wholesale slaughter by pesticides may soon be a thing of the past through the development of a selective insecticide produced by Imperial Chemical Industries trade named PIRAMOR. The product is at present used only in greenhouses and destroys the insect for which it is intended, but not its predator. A selective insecticide which did not affect bees would certainly be a break-through.

★ ★ ★

A BEEKEEPER IN POLAND claims to have taken a short cut with packaging problems and allows the bes to do the work for him. Wladyslaw Grabowski of Warsaw arranges empty jars within the hive in place of frames with foundations, and the bees construct natural comb within the jars and fill them with honey. There we are maestro, untouched by 'uman ands and ready to sell. Sounds wonderful if it works.

★ ★ ★

DO WE LIVE in the wrong country or have we failed to educate agriculturists sufficiently well to appreciate the importance of bees as pollinators? A New Jersey beekeeper in the US rents out his hives for apple pollination at $17 per hive and at $20 per hive for blueberries. Generously, he offers a discount if assistance is given in distributing and picking up hives as part of the contract.

★ ★ ★

A STATISTICAL REVIEW of bees and production in the US, published in GLEANINGS, shows that the yield varies from a low of 13 lbs to a high of 107 lbs and that the overall return was 41.9 lbs average for all States for the year 1968. On the same basis for 1967, the average yield was 46.3 lbs.

★ ★ ★

AN INTERESTING STUDY is reported in APIACTA by three economists in Argentine who set out to show the level at which apiaries are economic units. Pointing outthe "working capacity" of the person engaged in beekeeping, reference is made to the fact that output decreases by 20% when operated by persons other than the owner. 500 hives was deemed to be the maximum to manage without hired labour. Prophylactic treatment for the control of bacillus larvae accounted 3.60% of income based on a hive holding of 500 and a working capital of $1,357,030. One wonders what figure would be involved in New Zealand, where destruction is the cure.

The same journal reports that the principal aim of beekeepers in Hungary in dealing with diseases is to eradicate bacillus larvae by destroying the diseased colonies, expressing the view that prophylatic treatment gives temporary amelioration only. Every known contaminated area detected during the passed 20 years is rigidly checked by veterinary staff, and every colony throughout the country is examined annually. Compensation of 75% of the real value of destroyed colonies is reimbursed by the state.

★ ★ ★

KEEP YOUR ANTIQUES. A honey pot by Paul Storr made in 1880 in the shape of a skep recently changed hands at £1,750. A previous valuation placed the pot at £5.

★ ★ ★

FOR THE OBSERVANT EYE. "Never in the history of fashion has so little material been raised so high to reveal so much that needs to be covered so badly".

"THE TIMES" of London reports an interesting experiment with a sex attractant for bumble bees. AMr D. H. Callam of Rothamstead experimental station has isolated chemicals serving as scents to attract male partners for male bumble bes. These extractants are secreted by glands in the head of the bee.

Male bumblebees fly along flight routes, leaving their scent on certain leaves and twigs. Other bees of the same species may visit the same scent marks, but not bees of a different species. The queens attracted to these scent intersections will stand a greater chance of mating than the chance finding of a mate!

Dr. Callam has already identified several of these chemicals and it is thought that this knowledge may help in the "domesticating" of species of bumblebees particularly valuable, as pollinators of certain crops, and as the earliest pollinators on the wing in the spring.

★ ★ ★

LA BELGIQUE APICOLE reports a new cure for nosema with a German product named DIM 67. However, it also reports that the product's toxicity is too high for bes. This seems a pity, because the finest cure for a common cold in humans is a good strong dose of arsenic, but that too, is too toxic.

★ ★ ★

A WRITER in "Gleanings" quotes a useful idea for preventing fires on trucks emanating from a smouldering smoker. Having had his pants scared off with an unexpected flare-up, he inserts a piece of wire through a cork and at the other end a metal washer so that the heat of the smoker does not disintegrate the cork. A small cork in the base air hole and a larger size in the nozzle quickly smothers any live ash.

★ ★ ★

TASMANIAN FARMER reports a good sell from the apiary of Mr R. B. Charles at Mawbanna to the old established and giant Japanese trading concern of Mitubishi Company, Yokohama. 750 drums of 60 lb each totalling 38,000 lbs of white clover was loaded into the cargo vessel Ardina, and comprised the largest honey shipment to leave Tasmania. According to Mr Charles, the order could have been much greater had he had sufficient supplies.

PROPOSED TOUR TO CANADA

Beekeepers who were able to make the tour of Australian apiaries and plants will be interested to know that a further tour is envisaged in May 1970 to Canada.

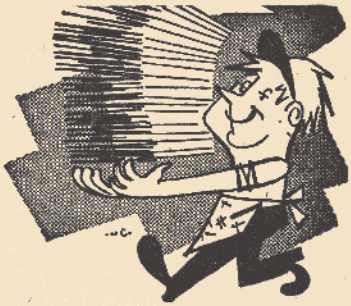
Organiser for the tour will again be Mr George Winslade, 1H, R.D., Oamaru, who will require a minimum of 15 members in the party, and definite bookings will have to be arranged by the end of September.

Estimated cost for the tour of Canada lasting 25 days is $1,100.

In the event that there is insufficient interest in a Canadian tour, there is a possibility that arrangements can be made for a further visit to beekeeping centres in Australia, which would be timed to arrive back in New Zealand to co-incide with Conference in Auckland in mid-July. Estimated cost for the Australian tour is in the region of $600.

There is no obligation at this stage for a definite commitment, but interested members are invited to contact George Winslade as soon as possible to enable him to gauge the likely potential and make tentative arrangements if the number so warrants. Member's friends would be eligible to join the party provided that beekeeper's requirements are first met. Please write, stating your particular preference for either tour to George at 1H R.D. Oamaru. The previous tour was instructive, enjoyable, and very well organised.

BRANCH NOTES



HAWKES BAY

Crops in Hawkes Bay have not been up to earlier expectations ,but we are looking forward to the coming season with our usual optimism.

During April the Branch held a Social Evening, with an Address on "Wax, the By-Product of the Beekeeping Industry", by Paul Marshall. This was followed by a panel discussion, which brought forth some interesting questions.

After supper, slides and an address by Graham Walton, who recently returned from Canada, showing Canadian beekeeping made up a very interesting evening.

Our new President is Mrs Gwen Dorward, and the Secretary Mr Ian Berry.

Reported by Mrs F. D. Maultsaid.

★ ★ ★

NORTHLAND BRANCH

Northland Branch held their annual meeting during May with a very good attendance of members and friends.

During the evening Bill Haines of the Far North Branch gave an interesting talk and showed colour slides of his recent trip around the beekeepers of Canada and America which all were very happy to see.

Last month was a bad one for beekeepers in this area, what with showers nearly every day and total sunshine only 32 hours for the month. The resultant stores are getting low in some colonies but we are hoping the manuka that is starting to flower will save the day. There was a great display at the Winter Show in Whangarei last month of honey and beeswax with 191 entries. I believe it could be a record for any show in New Zealand and next year we should get over the 200 mark. There was one novelty in the beeswax section entered by a Far North lady member in the form of a model of Captain Cook sitting on a platform. This was very appropriate with the centennial of his landing in New Zealand.

We will be holding a Field Day shortly and members will be notified in good time. All the boys up this area are hoping for a better honey crop than last year, so here's hoping.

Reported by Arthur Tucker.

★ ★ ★

NORTH OTAGO

A field day will be held at one of Mr C. M. Lory's apiaries located on Mr J. Garvan's farm near Tokarahi on Saturday 11 October.

The main theme will be feeding bees. Mr Lory and Mr S. M. Hurst, a local farmer/beekeeper will discuss and demonstrate the planting of useful trees and shrubs for bees. Mr V. A. Cooke's subject is trapping, storing and feeding pollen. Mr L. Griffin, retired Southland beekeeper, has kindly agreed to give a talk on wintering bees on sugar syrup, which he practised on 600 hives for 10 years.

No spring field day would be complete without an item on queen rearing. Messrs H. and M. Cloake will demonstrate their method of baby nuc management, in which they use puff ball smoke to anaesthetize the bees.

Detailed programmes, including a location map, will be sent to local beekeepers and South Island branch secretaries in September.

Reported by R. B. Maikie.

★ ★ ★

SOUTHLAND BRANCH

Invercargill being the venue for Conference saw many beekeepers from the north to whom, we the Southland

Branch, were happy to extend hospitality as in past years we have been welcomed to northern Conferences. The two-day Conference was held during reasonably good weather, but 20° frosts have ben recorded before and since with several light falls of snow on the hill tops. This should not be regarded as a very hard winter so far.

In fact, ground conditions in autumn and spring are more important to Southland beekeepers to allow access to apiaries sometimes well removed from the roadside.

The past season saw good crops all around in the region of 4 to 5 tons to the hundred hives.

The spring was extremely windy. 4 weeks dead calm in December — January period, with a really wet Autumn.

At a recent meeting in Invercargill a presentation was made to R. H. Hobbs, Apiary Instructor, who has since moved North, and a welcome was extended to J. G. McKenzie, who will be stationed at Gore as instructor for the Southland area.

The annual Field Day was held in late January at the home apiary of Mr J. R. Simpson, Maitland, and was well attended by local and northern beekeepers. Mr Simpson's home apiary can be seen from the road and at present has a large number of nucs each sitting on top of a post about 7' 6" from the ground. This looks like a good back saver.

Beekeepers are now getting their wax in shape for the market and general repairs etc. in preparation for another season.

Reported by K. M. C. Herron.

★ ★ ★

CANTERBURY

Cold, wintery conditions, with more than the average number of frosts have been the order of the day. It is wonderful how the bees come through such adverse conditions, but an inspection on one fine day disclosed four and five frames of brood and "alls well".

It is with deep regret we report the death of Mr George Albert Hunt of Ashburton. George, as an executive of the Cant. Association and a beekeeper of long standing, had a wide circle of friends; to Mrs Hunt and family we extend our deepest sympathy.

The Cant. Branch were pleased to have the honour of nominating Mr

(Continued on Page 43)

ITALIAN QUEENS

1969-70

UNTESTED	1 to 5	$1.50 each
	6 to 10	$1.45 each
	11 to 19	$1.40 each
	20 and over	$1.25 each
SELECT UNTESTED		20c extra per queen
TESTED		$3.50 each
SELECT TESTED		$4.00 each

DELIVERY: November to April

TERMS: Cash with order
Telegrams 30 cents extra.

Please include phone number with order.

Orders AIRMAILED free on request.

The development of these Queens extends over a period of 30 years, resulting in the creation of a hard working, high producing and non-swarming strain of gentle temperament.

Bred from disease-free hives under natural conditions.

Apply to—

F. D. WHITE

Commercial Queen Breeder,
P.O. Box 4032
KAMO, NORTHLAND

SWARMING in HONEY-BEE COLONIES

Some new information by Dr. D. J. Fletcher

(By courtesy of "Farming in S. Africa")

The importance of swarm control in securing large honey crops cannot be overemphasised. It is axiomatic that if the greater part of the working force of a colony leaves the hive with a swarm the amount of surplus honey that can be stored by that colony will be greatly reduced.

In spite of this, it seems that few bee-keepers in South Africa seriously attempt to reduce the incidence of swarming in their apiaries. Why is this? I think there are two main reasons.

Firstly, the relatively high frequency with which swarming occurs is not generally recognised. This is understandable, because most bee-keepers either operate out-apiaries or are away at work during the warmer part of the day when swarms emerge, so it boils down to a case of what the eye does not see the heart does not grieve over.

Secondly, the most effective control measures advocated in the past such as the Demaree method, are too laborious for the commercial man and a little too complicated for most hobbyists.

NEW LIGHT

Recent research has thrown new light on the fundamental causes of swarming and has consequently led to more efficient methods of controlling it.

The theory concerning the causes of swarming which has held sway since the early 1920's is Demuth's congestion theory. It holds that overcrowding of the broodnest area is the all-important factor and that any measure that will alleviate it will reduce the tendency to swarm. But inadequate room for brood rearing is not always a condition in colonies preparing to swarm, and this led Dr Simpson of the Rothamsted Experimental Station in England to investigate the matter further in 1963. He found that restricting the space available for the adult bees of a colony led to swarming, but that restricting the number of cells for the queen to lay in did not.

This discovery obviously represents an important contribution to our understanding of swarming, but we can go even deeper into its causes than this, thanks to the outstanding work of Dr Colin Butler who is head of the Bee Department at Rothamsted.

An essential prelude to swarming is the rearing of queen larvae in the special queen cells familiar to all bee-kepers. Dr Butler has shown that the worker bees are normally prevented from building these special cells by chemicals contained in the secretion of the mandibular glands of the gueen. The main constituent of the secretion is a substance known as 9-oxodec-trans-2-enoic acid (here shortened to oxodecenoic acid) which the queen spreads over the whole surface of her body using her legs. The workers nearest to her collect the chemical by licking her mainly on the abdomen and after swallowing it they distribute some of it among the other bees by offering them regurgitated food.

Careful experiments have shown that the oxodecenoic acid acts quantitatively, that is, each bee must receive a certain minimum quantity to suppress its

queen rearing instincts. It seems then that the root cause of queen rearing, and hence of swarming, is an inadequate supply of oxodecenoic acid to the worker bees. The question now is, how does this happen in a colony which is queen-right? Dr Simpson's work provides the answer.

Over population

Under conditions of overcrowding both the worker bees and the queen are constantly being jostled, so that the efficiency with which queen substance can be collected and distributed is seriously impaired and many of the workers receive too little of it and so start to build queen cells.

Although this explains why bees swarm if they become overcrowded we still have to find an explanation for swarming in uncrowded colonies.

A young, healthy queen produces enough oxodecenoic acid to prevent a very large worker force from rearing queens, but as she grows older or sickens she produces less and less and sooner or later her supply fails to meet the demand.

Several young queens are raised and in the normal course of events one of them replaces the old queen who eventually disappears from the hive. In the wild state a colony rarely keeps its queen longer than two to three years, depending on the egg laying demands placed upon her.

Under apiary conditions, where the bee-keeper often encourages oviposition by feeding the bees prior to a honey flow, queens may be superseded even more frequently than this. The process of queen supersedure and swarming are very similar and it has become increasingly apparent to research workers that the one often turns into the other.

The bees construct queen cells under the supersedure impulse and if the weather is particularly fine at the time the first cell is sealed, they may swarm instead and this is the origin of swarming in uncrowded colonies. The old queen that goes with the swarm is able to supply the oxodecenoic acid requirements of the smaller number of bes comprising it for a time and she is superseded later on.

Practical application

How can we put this new information about the causes of swarming to use in practical bee-keeping?

Since the greater part of the honey crop is obtained from the strongest colonies the bee-keeper will be most interested in preventing these from swarming.

The best way of doing this in the past was undoubtedly the application of the laborious Demaree method in which the queen is placed on empty combs in a brood chamber below an excluder, while the occupied brood combs are raised to the top storey of the hive.

This has always been successful in preventing swarming, but we can now appreciate that its success lies not in providing more space for brood rearing, which is the object of the manipulation, but in providing more room for the adult bes which permits more efficient circulation of the queen's oxodecenoic acid. Quite clearly it is an unnecessary procedure, because the provision of additional space for the adult bees can be achieved much more simply.

Two steps are recommended. Firstly, the permanent allocation of two brood chambers to each hive. This will ensure that much more space than usual is available to the adult bees and, equally important for maximum honey yields, the strength of the colony will not be restricted by too little brood rearing space. A good queen can keep twelve Langstroth brood frames supplied with eggs under honey flow conditions and one brood chamber holds only ten, two of which are in any case always used by the bees for the storage of pollen and honey.

Secondly, an adequate number of supers should always be placed on the hive. If there is too little honey storage spaec the foragers do not go into the field and they thus contribute to the overcrowding of the hive. It is also worth noting here that bees need more space for ripening honey than they do for storing it, since they only half fill cells with nectar until the excess moisture has evaporated from it. Too little super space for the ripening process therefore means smaller honey yields. As a rough guide, as soon as the bees start to use the top super, another should be added.

The answer to swarm prevention in uncrowded colonies is equally simple. Ageing queens should be replaced by the bee-keeper before the bees supersede them. This entails a queen rearing programme it is true, but if one takes into account that colonies weakened through the presence of an ageing queen will at best give poor honey yields, the effort is well worth while. Swarm control throughout the apiary would then consist of nothing more than giving the bees lots of room.

Finally, we might speculate on the problem of swarm control in colonies which the bee-keeper intentionally overcrowds for the production of high-quality section comb honey. At present this entails the regular removal of queen cells. Perhaps in the near future it will be possible to feed the bees oxodecenoic acid to offset the poor circulation of the queen's own production. Such a possibility awaits investigation.

(Cont. from Page 40)

Thomas Edward Pearson as a Life Member of the N.Z. National Beekeepers' Assn. at the recent Conference at Invercargill. Mr Tom Pearson has given a life-time of service to the Beekeeping Industry of N.Z., also as a valued member of National Executive, Honey Marketing Authority, Agricultural Chemical Board, "Skep" for N.Z. Bee keeper and past President of the Cant. Branch etc. His gracious manner together with his expert knowledge and ability has won him many friends throughout the Dominion. We are glad to have Tom still active in beekeeping affairs.

Reported by A. R. Eagle.

FOR SALE

HIVE MATS HIVE MATS
HIVE MATS HIVE MATS

FABRIC HIVE MATS (16in x 20in), manufactured from phormium tenax (native flax fibre), are available ex MANUFACTURER in bales of 150 mats at $9.50 per bale, f.o.r. Foxton. Orders for not less than one bale, accompanied by cash and stating railhead to which delivery is required, should be sent direct to:

N.Z. WOOLPACK AND TEXTILES LTD
P.O. Box 44, Foxton

QUEENS & NUCS

Advance orders taken for selected untested queens. October-April $1.50 each. Quiet but virile.
Four frame nucs, autumn tested queens. $6.00 plus freight and super. Ready now. Cash with order.

A. R. EAGLE
22 Hillsborough Terrace,
CHRISTCHURCH 2.

DAVIDSON UNCAPPERS

DAVIDSON UNCAPPERS

A new production set up now provides for these power uncappers to be available within New Zealand. An improved model with plenty of chrome plating.
Price: $1,000 for the standard model.

DAVIDSON'S APIARIES LIMITED
No. 4 R.D.,
TIMARU.

BEE SUPPLIES
Precision cut on automatic machines
Quality timber only
HOFFMAN FRAMES
$8.00 — 100 $37.50 — 500 $71.00 — 1000
Supers. Bottoms and Lids
N. PULLIN
9 Taiere Ter., Onehunga. Phone 668-061

FOR SALE

40 Two-Storey hives of bees with stores; excellent condition.

Apply: A. C. WARD,
26 Seddon Avenue,
WAIHI.

QUEENS QUEENS QUEENS

Thanks for orders received
Order book now full for 1969.
Booking now for 1970.

CHRIS. DAWSON
P.O. Box 423 TIMARU

QUEENS NUCLEI BREEDERS

BUY

8-FRAME REVERSIBLE EXTRACTOR

8-FRAME REVERSIBLE EXTRACTOR

(PENDER) wanted in good condition.

Offers: "EXTRACTOR"
c/o N.Z. BEEKEEPER.

SITUATIONS VACANT

YOUNG MAN — MARRIED OR SINGLE REQUIRED FOR PROGRESSIVE CANTERBURY BEEKEEPING BUSINESS.

PREVIOUS EXPERIENCE PREFERABLE BUT NOT ESSENTIAL.

Details to: "ENTHUSIAST",
c/o N.Z. BEEKEEPER.

BEEKEEPERS' ASSISTANT WANTED FOR SEASON. MODERN PLANT AND EQUIPMENT.

PERMANENT POSITION FOR SUITABLE APPLICANT.

C. L. MARRIOTT,
41 Hill Street,
MOLONG 2866 NSW
Australia.

SITUATIONS VACANT

YOUTH FOR TWO MONTHS
QUEEN REARING

We require an energetic young man to assist with putting out cells, August-September period.

Permanent job available.

Apply:
DAVIDSON'S APIARIES LTD.,
No. 4 R.D.
TIMARU.

WE REQUIRE A GOOD MAN

or keen youth who does not smoke.

Our beekeeping operations include large scale honey production and packing, wood work, queen rearing and vehicle maintenance.

Good wages with future opportunity to take part in the business, if suitable.

Phone: 627 Orini or write:
A. W. Hansen,
ORINI,
Waikato.

OPPORTUNITY

OPPORTUNITY

OPPORTUNITY

TOP BEEKEEPER OR MAN OR YOUTH POSSESSING NECESSARY QUALITIES FOR SAME IS REQUIRED FOR CENTRAL OTAGO BULK HONEY ENTERPRISE.

ABILITY AND EXPERIENCE WILL BE RECOGNISED BY REMUNERATION.

S. S. McAUSLAN
Box 73,
OMAKAU, Central Otago.

The
National Beekeepers' Association
(For the advancement of the Beekeeping Industry in New Zealand)

'Better Beekeeping—Better Marketing'

SUBSCRIPTIONS

0 to 20 hives	$2.00		1001 to 1100 hives	$22.00
21 to 200 hives	$4.00		1101 to 1200 hives	$24.00
201 to 300 hives	$6.00		1201 to 1300 hives	$26.00
301 to 400 hives	$8.00		1301 to 1400 hives	$28.00
401 to 500 hives	$10.00		1401 to 1500 hives	$30.00
501 to 600 hives	$12.00		1501 to 1600 hives	$32.00
601 to 700 hives	$14.00		1601 to 1700 hives	$34.00
701 to 800 hives	$16.00		1701 to 1800 hives	$36.00
801 to 900 hives	$18.00		1801 to 1900 hives	$38.00
901 to 1000 hives	$20.00		1901 to 2000 hives	$40.00

JOIN YOUR NEAREST BRANCH
AND DERIVE FULL BENEFITS

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

This Journal is issued to all members of the National Beekeepers' Association and direct subscribers.
Literary contributions and advertisements must be in the hands of the Editor, Mr L. W. Goss, P.O. Box 3561, 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.

ADVERTISEMENT RATES

Quarter Page	$4.50	Per Inch	$1.25
Half Page	$8.25	Min. Charge	65c.
Full Page	$15.00	for each insertion.	

Front Page Story

HELPFUL and little realised assistance to beekeepers and other producers of primary products is given by Government agencies overseas; perhaps the Department of Industries and Commerce would be well advised to focus its image to a greater extent on producers themselves that they might be the better acquainted with hard-sell efforts being made on their behalf in overseas markets.

Pictured on the cover is the New Zealand stand at the ANUGA FINE FOODS FAIR in Cologne, West Germany, and across the fascia is a stylised Kiwi motif and the legend HONEY FROM NEW ZEALAND.

At left is Mr M. S. Roberts, New Zealand Trade Commissioner in Bonn watching Mr Frank Briess, managing director of Premier Distributors Ltd. Auckland, show a squeeze bottle of honey to a prospective buyer.

Various packs of nectar source defined honey and packs of comb honey can be seen on the shelves, and for those with an acaedemic interest in the blonde managing the stand, the information is given that she is a German girl with a good command of the Queen's English. Well stacked with data on the commodities offered, prospective purchasers were referred to intermediaries such as Mr Briess or officials of the Embassy.

The ANUGA FINE FOODS FAIR is a bi-annual event held in different cities of Western Germany, and the next, scheduled for October of this year is to be at Munich.

Alliance Quality

Bee Supplies

FRAMES — AUSTRALIAN PATTERN

Frames manufactured to the same specifications as those used by bee-keepers in Australia and other overseas countries can be offered at no extra cost. Australian Pattern Frames are of almost identical external specifications to the New Zealand Type Frame — i.e. Top Bar 19", End Bar 9⅛" Bottom Bar 17⅝", and can be used and mixed with your existing Frames without worry.

The main features are that with a ⅜" Deep Top Bar a full comb can contain two extra rows of cells on each side—an increase of almost 5% The Top Bar is 1" wide, leaving a thicker comb for those who uncap to the wood and the End Bars are drilled for 4 wires — 33⅓% extra reinforcing resulting in stronger combs.

A number of commercial beekeepers have already tried some thousands of these frames and their comments and repeat orders indicate their satisfaction.

Comb foundation can be supplied ¼" wider at no extra charge to suit Australian Pattern Frames.

BEESWAX

Secure our quotation before you sell. Large quantities required at top market rates to meet overseas orders.

The Alliance Bee Supplies

COMPANY LIMITED

25 Sawyers Arms Road, Papanui, Christchurch, 5.

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

Phone 526-044

BOUGHTWOOD PRINTING HOUSE, North Shore