

THE
NEW
ZEALAND

BEEKEEPER

AUGUST, 1970



THE NATIONAL BEEKEEPERS' ASSOCIATION of N.Z. Incorporated

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THE
NEW
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BEEKEEPER

VOL. 32 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:
\$1.50 per annum, post free
Registered for transmission by post as a Magazine.

Editor: Leslie W. Goss

AUGUST, 1970

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UNANIMITY

EVERYONE IS ENTITLED to his own views, and at the annual Conference proceedings ample opportunity is given for free expression of thought and action. Obviously and rightly so, there are many contentious matters discussed, with the result that a unanimous Resolution from a branch or from a private individual is a rarity.

There is invariably some measure of disagreement, but as with all democratic institutions, the minority bows to the wishes of the majority even if their personal opinion cannot be prevailed upon to change.

It was noticeable, however, that out of all remits on the Order paper for consideration, number 26 from the Bay of Plenty had absolute and complete unanimity. The Resolution read as follows:

"That this Conference is concerned at the possibility of illegal entry of queen bees, and request that the strongest possible measures be taken against future illegal importations."

Every voting member endorsed this remit with wholehearted support. We all know that the offence is extremely difficult to detect and that physical search of every person entering the country from overseas would be an impossible burden on the Customs and an intolerable infringement of the liberty of the ordinary citizen.

This subject has been mentioned before and it is mentioned again.

Every beekeeper must steel himself to face the fact that he **MUST**, for his own protection and for the protection of the industry as a whole, report immediately to the Apiary Section of the Department of Agriculture any information he may have of an illegal importation having been made.

Information given to the authorities would not be the act of a sneak or tell-tale snooping behind another's back. It would be common sense, and an act of self preservation which would gain the thanks and commendation of every beekeeper in his right mind. Any beekeeper too timid to report such information is an unmitigated fool.

Our export of N.Z. bred queens is largely dependent on the fact that we have no importations of queens from overseas which might carry disease.

It has yet to be proved by the Courts that illegal importations have been made and every man is deemed to be innocent until he is proved guilty.

Claims which may or may not be factual concerning the merits and

origins of certain queens could well originate from a misconceived sense of grandiose self importance as a breeder. Whatever the facts, it cannot be disputed that the man who brings in any queen from outside New Zealand is not only guilty of an offence against the law but performs an act to the possible detriment of every beekeeper in this fair country and is worthy of severest penalty and our united contempt.

Consider the dire consequences of some idiot bringing in a queen which carried a disease prevalent overseas. The result might well be parallel with the dreaded foot and mouth scourge in the United Kingdom. Whole apiaries destroyed by fire; businesses ruined; overseas markets lost. It is a terrifying thought.

BOOK REVIEW

THE MAGIC OF HONEY by Barbara Cartland, a Mini-Book by Corgi, London.
N.Z. 45 cents, 160 pp. Trade distributors: Gordon & Gotch Ltd.

If we are to believe Miss Cartland's claim, honey is the greatest of foods and the Elixir of Life and will cure almost any ill to which the human frame is prone. Such is it's powers as a sex stimulant that surprise must be expressed that beekeepers' families are not of gargantuan proportions, for most of us eat more than average of our own product.

After reading the chapter titled HONEY FOR LOVE, which starts with the worry doctors have in dealing with impotent men of 30, and the extraordinary love life of men and women in their late 80s who feed themselves on this pleasant and sweet tasting aphrodisiac, one is tempted to wonder what has been missed by non-honey eaters over the years.

There can be no doubt but that sales of this book in any part of the world will result in increased purchases of honey, and the impact of the bookseller's efforts may well be felt by beekeepers in this country. It is a little confusing, however, to learn on one page that honey is the ideal food for encouraging an early night in bed for purposes other than sleep, and on another that the best way to induce sleep for sufferers from insomnia is to take honey before retiring. Honey will apparently wake you up or send you to sleep as may be required, which is certainly accommodating.

The style of writing is unusual for a book and is in chit-chat form of the "so I said to her" and "she said to me" variety usually reserved to the columnist, but the author has an undoubted reputation the envy of many journalists of more humble accomplishments. She has 120 books to her credit, is a playwright, lecturer, and a TV personality. Perhaps coyly, Miss Cartland does not state her age, but from the full colour reproduction on the front and back cover, she has retained a most attractive appearance, and appears to reflect the joys of life, which honey may or may not give.

Whilst a eulogy of honey as a food or aphrodisiac is always acceptable, it is to be hoped that readers will not gain a false impression and rush out to buy a pound of honey with high hopes. If the results anticipated are not forthcoming, the disappointment might react adversely to the continued sale of a fine product, basically known for its food value.

On the grounds of accuracy and fact, Miss Cartland must be criticised for her comments on Royal Jelly, and the thought must necessarily arise that other recommendations given in her book might also be suspect.

National Beekeepers' Association

DOMINION CONFERENCE

at Auckland - July 1970

DELEGATES FROM BOTH ISLANDS OF NEW ZEALAND ATTENDED THE FORMAL OPENING OF CONFERENCE, AND TOTALLED SOME 140 IN NUMBER TO BE WELCOMED BY THE MAYOR OF TAKAPUNA AND ADDRESSED BY THE PARLIAMENTARY UNDER-SECRETARY TO THE MINISTER OF AGRICULTURE, MR. A. D. DICK, M.P.

THE CITY COUNCIL PROVIDED FREE PARKING FACILITIES AS A GESTURE OF GOODWILL TO DELEGATES WITH CARS, AND INCLUSION OF AN ATTENDANCE TAB VISIBLE FROM THE WINDSCREEN GAVE AN AUTOMATIC INDEMNITY FROM ATTENTION BY THE METER MAIDS EMPLOYED TO SEE THAT ERRING MOTORISTS PAY THEIR DUES.

THE HOST BRANCH ARRANGED A GET-TOGETHER MEETING ON THE EVENING OF TUESDAY TO SOCIALISE AND LOOSEN TONGUES AND MEET OLD FRIENDS, WHILST ON THE WEDNESDAY NIGHT A DINNER AND DANCE WAS CELEBRATED IN VERY PLEASANT SURROUNDINGS. ON THURSDAY A COACH FROM THE CONFERENCE HALL ENABLED ALL TO VISIT THE PLANT OF THE HONEY MARKETING AUTHORITY WHERE AFTERNOON TEA WAS SERVED, AND EARLIER THE LADIES HAD BEEN TAKEN ROUND THE SIGHTS OF AUCKLAND TO VIEW HARBOUR SCENES FROM VANTAGE POINTS.

In his address to Conference, the Parliamentary Under-Secretary for the Ministry of Agriculture, Mr. A. D. Dick, M.P. had some pertinent comments to make on the industry in general and its marketing problems.

Referring to the peaks and troughs of an industry dependent on climatic conditions to a large extent, Mr. Dick pointed out that the estimated production last season was 5,678 tons — some 995 tons less than the previous year yet well above the past six year average. It was apparent that expansion into new territories was taking place and that there was a marked trend for the industry to be concentrated more in the hands of larger commercial holdings.

Commending the fact that the operations of the Honey Marketing Authority would be the subject of interest by Conference, Mr. Dick mentioned that a number of approaches had been made by individuals to the Government suggesting that there should be intervention in various ways on which the Authority has made policy decisions. The Authority, however, is the body entrusted with the functions of promoting the orderly marketing of honey, with as little Government intervention as possible.

The producer has the option to sell his honey himself or to the Authority; the latter has to accept all marketable honey offered to them and cannot with certainty know what quantities there will be. Facilities have to be maintained for handling a high intake, and during years of low yield is faced with high overheads. When there is a large crop, very considerable financial resources are needed to meet pay-outs.

Mr. Dick referred to the provisions of the Reserve Bank Act, whereby Statutory Marketing Authorities could receive finance by overdraft at very low

rates of interest but pointed out that there had to be a limit, and it was never intended that the entire intake should continue to be financed by overdraft accommodation at low rates. The Authority had therefore been asked to build up reserves and lessen its reliance on Government aid. The Government view was that low rates should be made available for that portion of the intake which was to be exported, but that home sales should be financed by the Authority on a competitive basis with private packers.

On the question of the levy and NBA support for a review of present procedure, Mr. Dick assured Conference that any proposals which represent the industry and which provide for a form of levy to be imposed equitably would receive sympathetic consideration.

It might even be thought the time is opportune to abolish the levy entirely and vest the marketing operations of the HMA in a honey producers' co-operative, and re-constitute the Authority with the sole function of regulating exports. Until such time, however, as the HMA Regulations were amended, the present levy remains payable to the Authority as a legal charge.

On the subject of Queen exports to Canada, Mr. Dick reminded Conference that it was essential to ensure an adequate supply of superior strains for local needs as well as for export. There had been some pressure to allow importation of new strains, but very stringent precautions would have to be taken to ensure that diseases are not introduced thereby, and any importation must necessarily increase the risk.

Illegal importation was a constant source of concern and could result in most serious repercussions. The offence is difficult to detect and even more difficult to prove, but proposals are under consideration for a further tightening of the provisions relating to illegal importations and are being considered.

PROCEEDINGS

Following the opening of Conference by Mr. A. D. Dick, M.P., 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. Both reports are published in this issue.

REMITTS

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 — FINANCE

(1) WAIKATO: "That Executive be asked to inform Hon. Mr. Muldoon of the special circumstances that apply to the beekeeping industry in the application of funds to the HMA, namely:

- (1) The promise of his Government that funds would be available if the industry took over the Government IMD marketing establishments.
- (2) That the impact of devaluation is quite different in our case from that applying to any other industry
- (3) The general importance to the country of the beekeeping industry.
- (4) The impact of the overseas selling period and the need to hold a new seasons crop until sales occur and other factors." (Tuck/Barber). LOST.

(2) SOUTH CANTERBURY: "That this Conference request the Government to reinstate the 1% money for all the finance required by the HMA to buy honey stocks." (Bartrum/Clarke. Amended Fraser/Barber). CARRIED.

(3) HAWKES BAY: "This Conference is of the opinion that the loss of some of the 1% overdraft money to the industry was a direct result of the actions of the HMA." (Berry Jnr./Berry Snr.). LOST.

MARKETING

(4) SOUTH CANTERBURY: "That it be compulsory for the HMA to control the purchase of all bulk honey. Packers selling their own honey would account for it by purchasing seals in the usual manner, or by declaration when filling customers containers. Packers requiring additional honey would draw their supplies from HMA Depots. Price of bulk honey to be announced at Conference for the following year by the Authority after consultation with the Packers Association." (Bartrum/Proforma Ashcroft). LOST.

(5) HAWKES BAY: "That the Department of Industries and Commerce be asked to operate a scheme assuring the industry of a minimum floor price per grade, being not more than 80% of domestic wholesale realisations over the past 5 years. This assurance is to replace the current HMA as a stabilising and regulating force in the industry." (Ward/Berry). LOST.

HMA PAYOUT

(6) WAIKATO: "Provided that the HMA costs are met it is of prime importance that the producers receive an adequate payout, rather than the HMA establish reserves. We therefore protest against an amount reducing payout substantially being set aside for reserves at a time of steeply rising costs, so that producers returns are diminished." (Jansen/Fraser). CARRIED.

(7) SOUTH CANTERBURY: "That the HMA payout for honey be in line with net realisation for each category." (Bartrum/Cloake). CARRIED.

(8) HAWKES BAY: "This Conference strongly disapproves of price cutting practices." (Gordon/Berry, Amended Fraser/Poole). CARRIED.

(9) WAIKATO: "That HMA freight policy, both in relation to depots and charges be re-examined." (Carey/Haines). CARRIED.

HMA FACILITIES

(10) SOUTH CANTERBURY: "That this Conference strongly recommends that the HMA Auckland plant be disposed of and that less expensive premises, not necessarily in Auckland, be purchased or built." (Bartrum/Holt). LOST.

(11) SOUTH CANTERBURY: "That the HMA Hornby Plant be sold and the honey now being packed in the Plant be packed in the Pleasant Point Plant." (Bartrum/Berry). LOST.

EXPORTS

(12) HAWKES BAY: "That conference urges the Government to direct the HMA to give immediate notice to Kimpton Bros. that the sole agency agreement will be terminated in September 1971." (Berry Snr./Berry Jnr.). LOST.

(13) HAWKES BAY: "This conference strongly disapproves of the HMA action of leaving the export market almost bare of New Zealand honey while at the same time leaving honey to deteriorate for more than 12 months in poor storage facilities at the Napier depot." (Gordon/Berry). CARRIED.

(14) SOUTH CANTERBURY: "That this conference recommend that licences be issued for the export of unlimited quantities of packed honey to private individuals to export to any country and there be no levy applicable to this honey." (Bartrum/Hansen). CARRIED.

(15) NORTH OTAGO: "That this conference requests that the Honey Marketing Authority take a more liberal outlook on the exporting of honey and to encourage private individuals to export." (Winslade/Jansen).

(16) SOUTHLAND: "That honey producers be given authority to export bulk honey or packed lines in any quantity not exceeding 20 tons per consignment subject to departmental inspection and grading." (Delegate's request for withdrawal declined. Berry/Stuckey. Amend.: Berry Jnr./Hordon). CARRIED.

(17) SOUTH CANTERBURY: "That the election of producer members to the HMA be held after the 1st November." (Bartrum/Berry). LOST.

ADVERTISING

(18) AUCKLAND: "That this conference is of the opinion that the Honey Marketing Authority launch an advertising campaign to sell its own brands on the local market particularly the honeys that cannot be sold economically on the overseas markets." (Blair/Carey, Amend.: Jansen/Barber). CARRIED.

FUNCTION OF HMA

(19) AUCKLAND: "That a committee of interested suppliers be set up to investigate whether or not it would be feasible to turn the Honey Marketing Authority into a Co-operative Body." (Blair/Berlin). CARRIED.

(20) CANTERBURY: "That the N.B.A. be requested to set up a committee to investigate the functions of the Honey Marketing Authority to determine whether it is operating in the best interests of all producers with specific reference to:

1. Industry Fund.
2. Packing for local market.
3. Export of packed and bulk honey.
4. Further expenditure on Auckland Plant." (Penrose/ Ecroyd). CARRIED.

(22) AUCKLAND: "Because of the threat of direct action by the Packers Association no credit (a) be given to seals buyers until the threat of direct action is withdrawn. (b) After the above has been carried out interest be charged on all credit to seals buyers at least at the highest rate paid by the Honey Marketing Authority to the Government on its loan from the Government." (Blair/Brookfield). LOST.

DEPARTMENTAL

(23) WAIKATO: "That the HMA be asked to investigate the Kamahi group with a view to the removal of anomalies in regard to mild flavoured honey being included in this group." (Tuck/Jansen, Amend.: Bushby/Bray). CARRIED.

(24) HAWKES BAY: "That this conference requests that the Department of Agriculture carry out an investigation into existing bee strains within New Zealand with a view to improvement of stocks." (Berry/Haines). CARRIED.

(25) OTAGO: "That the Department of Agriculture be requested to cooperate in gaining information from farmers regarding wild colonies on their properties." (Heineman/Poole). CARRIED.

(26) BAY OF PLENTY: "That this conference is concerned at the possibility of illegal entry of Queen bees, and requests that the strongest possible measures be taken against future illegal importations." (Barrow/Higgins, Amend.: Ashcroft/Haines). CARRIED.

(27) BAY OF PLENTY: "That this conference is appreciative of the work that is being done by the Department of Agriculture in attempting to find a suitable poison wasp bait and request that this work be given top priority." (Higgins/Barrow). CARRIED.

28. WAIKATO: "That this conference deplores Government subsidising of insecticides and suggests they explore less dangerous methods to assist the farmer, particularly in view of worldwide concern over the progressive deterioration of our environment and the unknown menace to posterity posed by large scale use of such dangerous poisons and that the use of insect parasites be advocated, provided they are not harmless to bees." (Tuck/Barber). CARRIED.

(29) SOUTHLAND: "That this conference is opposed to all insecticides being used on New Zealand pastures." (Glynn/Herron). LOST.

(30) NORTH OTAGO: "That this conference requests that the Director of the Water and Soil Conservation, Ministry of Works, Wellington, be approached to plant pollen and nectar bearing trees, such as willow etc. which will assist beekeepers and the Water and Soil Conservation alike." (Winslade/Tuck). CARRIED

(31) SOUTH CANTERBURY: "That the Executive of the National Beekeepers' Association make representation to the appropriate Authorities to have the Drought Relief available to beekeepers." (Cloake/Winslade). CARRIED.

LEVY SCHEME

(32) WAIKATO: "That conference supports the principal of the honey seals National levy payment which is the basis of our industry fund. That we urge the National Executive to endeavour to secure the maximum collection possible. Further, this levy be recognised as a cost factor, as is the power, depreciation and other overhead expenses of either the producer or packer." (Tuck/Jansen). CARRIED.

(33) SOUTHLAND: "That this Branch commends the Executive on their efforts to institute an Industry Fund and it is hoped that their efforts will result in a satisfactory outcome." (Glynn/Flaser). CARRIED.

ASSOCIATION — FINANCIAL

(35) WAIKATO: "That we object to the increase in subscription to the National Beekeepers' Association on the grounds that the methods used whereby members had no prior notice, a highly unsatisfactory procedure." (Jansen/Carey). LOST.

(37) HAWKES BAY: "That in order to free the N.B.A. administration from dependence on HMA finance the N.B.A. shall in future be financed by members' subscriptions, as at present, plus a levy per hive on all beekeepers with 30 hives or more. The amount of this levy is to be related to the present grant from the HMA and to the ability of the N.B.A. to publish its Journal independently. The incoming Executive is requested to take the necessary action without delay." (Berry Jnr./Berry Snr.). LOST.

(38) AUCKLAND: "That Executive approach Insurance Companies in order to investigate broadening our present insurance cover and branches be given copy policies in future." (Blair/Belin). CARRIED.

(39) OTAGO: "That all correspondence now sent to direct members be sent to all members on request at cost." (Heinemann/Stuckey. Amend.: Belin/Holland). CARRIED.

ASSOCIATION RULES

(40) EXECUTIVE: "That the Association's financial year end on 31 July." (Barrow/Winslade). LOST.

(42) WEST COAST: "That the Association Rule Book be printed and distributed." (Holland/Forsyth). CARRIED.

(44) WEST COAST: "That the 1971 Conference be held at Greymouth." (Holland/Glasson). CARRIED.

ELECTION OF OFFICERS

Nominations were called for the office of NBA President for the ensuing year and the Chairman having announced that he would decline further nomination for the office, conducted the proceedings. Mr. Trevor Palmer Jones and Mr. Eric Smaellie of the Department of Agriculture were unanimously elected scrutineers, and the declared results were:

PRESIDENT: Mr. Bruce Forsythe of Ohaupo.

VICE-PRESIDENT: Mr. Ivan Dickinson of Milton.

MEMBERS OF EXECUTIVE: NORTH ISLAND: Messrs. R. Blair, Auckland and R. Jansen, Taupo.

SOUTH ISLAND: Messrs: F. Bartrum, Pleasant Point and David Penrose, Christchurch.

It will be noted that there are two new members to Executive.

LIFE MEMBERSHIP

Undoubtedly the happiest ceremony during Conference proceedings in which everyone could participate and forget their 'fighting and feuding' for a few minutes was the bestowal of Life Membership on one of the industry's greatest fighters.

On the motion of the Waikato branch, Conference unanimously and enthusiastically endorsed the bestowal of Life Membership on **ERNEST WILLIAM SAGE**

of Ohaupo, a founder of the Association and active member of organised beekeeping since 1905 and associate of other such stalwarts as Messrs. Bray, Nelson, Williams and Pearson.

Reminiscing on his early days, Ernest reminded listeners that he first took an interest in beekeeping at the age of 5 and since he was now 82 the interest could hardly be said to be a passing infatuation. In the early days of the Association's formation, delegates travelled down (or up) to Wellington from their starting place and were allowed ten shillings expenses for their three days work. If the train did not stop near to the delegate's home on return, it was a simple matter to walk along the line for a matter of ten miles or so.

It is easy to see from the recipient's present manner and bearing that he was no weakling to be trifled with in his younger days—or indeed now—and there are many who envied his ease of address and clarity of faculty, despite the passing of the years.

By happy coincidence, the Life Membership certificate was bestowed on the anniversary date of Mr. and Mrs. Sage's wedding on July 8, 1912 and Mrs. Sage attended the meeting to share her husband's honour. Exceptional vigour and good health is enjoyed by both, and whilst the age of ladies is not specified in print, it is betraying no secret to mention that she is her husband's senior in years but has the appearance, energy and bearing of a woman many years younger. Mrs. Sage does not, however, share her husband's affinity to bees. As an abnormal reactor to their inoffensive stings, she prefers to keep as far away from them as possible.

REPORTS

Reports on a variety of subjects were given, some of which will be published in this or later editions in full or synopsis form. In the absence of Mr. Tom Pearson, the NBA delegate to the **AGRICULTURAL CHEMICALS BOARD**, his work for the year was read to Conference.

A detailed explanation of the requirements of the **APIARIES ACT, 1969**, was given by the Superintendent of Beekeeping, Mr. Eric Smaellie and members who were not present at Conference are recommended to obtain from the General Secretary of the Association a complete copy of the Act to read and digest their obligations. Copies are readily available at 20 cents each, or may be obtained through branch secretaries.

WALLACVILLE ANIMAL RESEARCH CENTRE work for the year was given by Mr. Trevor Palmer Jones, and a further appeal was made to beekeepers to use the facilities of the Centre where insecticide poisoning or paralysis is suspected. An adequate number of bees should be collected, both live and dead and despatched as soon as possible to Wallacville giving any known factors such as use of insecticides within the district which might be the cause of fatalities. The service is quite free.

CADETSHIP IN BEEKEEPING was explained by Mr. I. J. Dickinson and it now seems feasible that the work of Messrs. Dickinson, Cook and Heineman will bear fruition to the immense benefit of the industry and to young men wishing to embark on a career as an apiarist. It is envisaged that the scheme will be conducted on similar lines to that sponsored by Federated Farmers'.

THE LEAF CUTTER BEE and its use as a possible pollinator of lucerne in New Zealand was described by Dr. B. J. Donovan of the DSIR at Lincoln. Dr. Donovan hopes that permission to import trial releases of the leaf cutter bee will be possible, and assured Conference that there is no ground for thinking that the newcomer may carry disease to honey bees or compete for nectar sources.

NOTICE OF MOTION

"That in order to stabilise the price of honey the NBA arrange at its first meeting after Conference, consultation between the HMA and the Packers' Association to declare a minimum price for the various grades of bulk honey at the honey house for the coming season." (Belin/Holt). CARRIED.

GENERAL BUSINESS

Before the close of Conference a unanimous vote of thanks was passed to the host branch for their welcome and hospitality and in particular to the ladies present who provided a service of morning and afternoon tea. When it became obvious that business would continue for longer than anticipated and there were still important remits for consideration at mid-day, the ladies saved the situation by purchasing and making sandwiches for lunch so that a half hour break could be taken and business resumed earlier than would otherwise have been possible.

Conference was declared closed late in the afternoon of Friday, July 10; a motion of thanks to the Chair for his conduct of Conference and impartiality was met with applause.

N.B.A. PRESIDENT'S REPORT

There have been three very full meetings of Executive during the year and wherever possible members have attended branch meetings and Field Days.

NORTH ISLAND SEMINAR: The Association, in conjunction with the Department of Agriculture held a seminar for beekeepers at Ruakura, Hamilton last August. This was the second held in the North Island and it followed the pattern of the very successful seminar at Timaru.

The popularity of the seminar was proved by the attendance of about 120 beekeepers and visitors at Ruakura.

I would again like to thank the various speakers for the excellence of their addresses, and demonstrations, and to congratulate and thank the members of the organising Committee for their very able conduct.

1969-70 HONEY CROP: The past season could be termed the year of surprises and disappointments. Early in the season we saw areas of the South Island having one of the worst droughts on record with beekeepers hard pressed to keep hives alive. Then the rain came and tremendous pasture growth followed, so that most beekeepers got crops of honey.

In parts of the North Island an excellent winter was followed by a good spring and then came weeks and weeks of the driest summer on record. Pastures burnt out prematurely and crop returns were below average. Areas which received sufficient rain recorded the best crops for many years.

CADETSHIPS IN BEEKEEPING: During the year a Committee comprising Mr. I. J. Dickinson, Mr. V. Cook and Mr. J. Heineman, investigated the feasibility of a Cadetship on Beekeeping. The aim of the scheme was to encourage young people to make beekeeping a career by providing comprehensive training with adequate remuneration.

The Committee is now looking into the possibility of incorporating the Beekeeping Cadet Scheme into the Federated Farmers' Farm Cadet Scheme.

Not only do we seek the Department's support and assistance, but more especially we need the support of the beekeeping industry itself. The success we make of this possible extension to our Association is in our hands.

On behalf of Executive, I thank most sincerely Messrs. Ivan Dickinson, John Heineman and Vince Cook for their exploratory work on this scheme and for the time they have given to it.

OVERSEAS TOUR: Unfortunately, the proposed trip to Canada had to be cancelled, due to lack of sufficient beekeepers being able to make the tour, and to the indifferent honey season experienced by the majority of members.

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"The foundation of Success"

Mr. George Winslade has put a tremendous amount of work in arranging the Canadian tour of beekeeping establishments and the very popular Australian trip of three years ago.

UNCAPPING MACHINES: My report would not be complete without making reference to the wonderful contribution to our industry by the work of Messrs. Penrose and Davidson with their uncapping machines. It is most satisfactory to hear that these machines are proving popular overseas as well as in our own industry.

LIBRARY: Mr. C. Dawson informs me that interest in the Library continues to grow. Further new books have arrived and are being added to the catalogue of books available. To our Librarian, I extend thanks for the valuable work he is doing for us.

JOURNAL: "The New Zealand Beekeeper" is a most valuable source of information on the Association's activities and of beekeeping trends throughout the world. We are indebted to the many people who so willingly submit articles and to our Editor, Mr. L. W. Goss, for the excellent manner in which the material is prepared for publication.

INDUSTRY FUND: At Conference last year the following Remit was passed—"That the Executive investigate a more equitable means of collecting an Industry Fund than is now collected through the Seals Levy."

During the year your executive has taken considerable time to look into this matter and has sent out to Branches preliminary proposals for comment.

We have brought down a Report for this Conference and I trust it will be discussed in a really worthwhile and profitable manner.

THE RESTRICTED ZONE: In the first year of beekeeping operations in this area good use has been made by six beekeepers for spring feed and build-up for their hives. Thirty six permits were issued covering 1,335 hives. In no case was individual entitlement exceeded and it is with much satisfaction that I report on the spirit of co-operation which has been shown by all concerned.

LEGISLATION—APIARIES BILL: The Apiaries Bill was passed by Parliament during the year and became operative from 1st April, 1970.

FOOD HYGIENE REGULATIONS: The Health Department will bring forward Regulations governing the inspection of honey houses.

These have yet to be finally drafted and beekeepers will be given the opportunity to discuss proposals as soon as they are available.

GENERAL SECRETARY: During the year we have had a change in the position of General Secretary. Mr. E. R. Neal, a Chartered Accountant of Wellington, was appointed and his duties commenced on the 1st of May. Mr. Neal has also been appointed Returning Officer for the H.M.A. Elections.

HONEY MARKETING AUTHORITY: The attendance of the Chairman, Mr. Jack Fraser, at the March meeting of the Executive, and of Authority members at various branch meetings and Field Days throughout the year has been the means of keeping us well informed on matters relating to the industry.

EXTENSIVE PRICE CUTTING: Extensive price cutting has been taking place on the local market which can only mean an eventual lowering of beekeepers' standard of living.

New Zealand has never been so prosperous. Paradoxically, there is a great deal of unrest and lack of co-operation and goodwill in many fields.

AGRICULTURAL CHEMICALS BOARD: We are again indebted to Mr. Tom Pearson who represents our industry on the Agricultural Chemicals Board.

APPRECIATION: On behalf of the Association I extend to Mr. Greig, Director of Horticulture, to Mr. Smaellie, Superintendent of Beekeeping and all officers of the Apiary Section of the Department of Agriculture and to Research Officers, sincere thanks and appreciation for their valued assistance to our industry.

I have had another interesting year, and as I shall not be making myself available for re-nomination, I take this opportunity of wishing my successor as rewarding an experience as I have had.

D. A. BARROW.

HONEY MARKETING AUTHORITY

CHAIRMAN'S REPORT TO CONFERENCE

During the year, members of the Authority have been available to meet Executive and Branches of the Association. In consultation with your Executive, the Authority convened two meetings of producers, at Oamaru and Hamilton, both of which were well attended, and to judge by the number of remits dealing with marketing on your Order paper, inspired some thought.

I would like to comment on the Annual Report and Statement of Accounts for the year ending 31st August last. The pay-out of 11.75 cents per lb has been widely criticised on the basis of a comparison with the pay-out for the preceding year of 14 cents. Such a direct comparison does not take into account the fact that this 14 cents was paid, partly from reserves and largely on a straight purchase basis, in a year of disastrous crop returns.

The Payout

The pay-out last year should be considered in the light of the altered application of grading points, the universal supply of containers and the freight allowances paid in cases where honey was directed past the nearest depot. Comparison of overall payments per lb, as shown on page 14 of the statistical section of the Annual Report, thus shows last year's pay-out to be the highest since the Authority began operations.

The completed export sales for the period are low: as explained last year, shipping difficulties slowed up our export programme, and at the end of the season we had unsold stocks, at home and abroad, totalling 1246 tons. Reduction of this backlog was interrupted by widespread threat of drought in the early part of the present season, when it was decided to withhold from sale of the clover category. I should emphasise that this was the only honey

withdrawn: sales of all other honeys were effected as usual, nor was there any intention that this honey should be dumped anywhere. Sufficient stocks were withheld to guarantee, as far as possible, the continued supply of the Authority's packs within New Zealand.

In the event, the Dominion crop was unaffected by drought, and to the period 30th June, 1970 our intake together with honey held in producers sheds, totalled 2033 tons. (2202 tons last year).

Of this, exports to date shipped and on order totalled 773 tons, a figure already substantially higher than for any of the last 5 full years.

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

IMPERIAL BEE		
	This Year	Last Year
Local	119	150
Export	38	36
	157	186
HONEYGOLD		
	This Year	Last Year
Local	101	46
Export	½	1
	101½	47
SPECIALTY PACKS		
	This Year	Last Year
Local	81	95
Export	32	43
	371½	371
PLEASANT POINT		
	This Year	Last Year
	509¾	519
HORNBY		
	This Year	Last Year
	97¾	130

Overseas sales have continued at satisfactory levels, despite an acceleration of sales in recent weeks, to which I shall make further reference later.

Within New Zealand, the Authority has been criticised for cutting prices, not only for HONEYGOLD, but for other packs. With regard to HONEYGOLD, the "special" which has since the inception of this pack been an annual feature, could not be met, in terms of quantity at the time. Delivery was made in two lots, each covering half the country. In our view, and that of our client, this constituted one special only. However, we have since found that in some areas, there was some overlapping. Steps have been taken to see that this does not recur.

In another instance, the question arose through a set of circumstances foreseen by the investigating committee of 1960, when it was pointed out that not only should the manager be left free to manage, but that conflict of industry interests was such that his natural instincts as manager and salesman would inevitably conflict with sectional interests. In one or two instances during the year promotional allowances were given. When these came to the attention of the Board, they were stopped. I am not blaming the manager, nor sheltering behind him. I am stating the facts, one of which is that it is not the Authority's policy to cut prices.

Export Permits

During the year, the Authority's policy on the grading of export permits has come under continuing criticism. Here I need say only this. The Board's policies are dictated by a desire to safeguard the interests of producers on our export markets. The chief danger we would avoid is the competitive selling which has proved disastrous in the experience of other honey exporting countries.

During the year the Authority has reviewed the whole question of the ownership of its properties. In Auckland, the Parnell building could have been sold for \$200,000, a condition of the sale being that we continued as tenants for ten years at an annual rental equal to 10 per cent of the purchase price. This meant an annual outgoing of \$20,000 without equity as against our present outgoings of under \$14,000 with equity. Similar offers have

been made for the Hornby Plant.

The Auckland building has been withdrawn from sale, and plans are in hand to adapt both buildings and plant to meet present needs. It has also been decided to remain in occupation, and continue operations from both Hornby and Pleasant Point, though the question of consolidation on one or other is being kept under review.

Overdraft Needs

As I have already mentioned, the 1968/69 export programme got away to a slow start because of shipping difficulties, and at the end of the year was further slowed by the decision to withhold the top clover categories pending the outcome of the drought threat. In the event, good crops were realised in most areas, and because honey was received into depots without granulation, the intake was much more sudden than usual. This combination of factors made the existing overdraft accommodation insufficient, and it was found necessary to have it twice raised. In granting both applications, the Minister of Finance laid down a timetable for the progressive reduction of the overdraft granted us, and has made it perfectly plain that Government expects the industry to rely more on its own resources and less on Reserve Bank credit.

While I do not agree personally—nor do most members of the Board—with the idea that reserves should be created with which to finance our honey purchases, I am bound to admit that when the industry accepted its present organisation under regulations framed under the Primary Products Marketing Act of 1953, it rendered itself liable to Government direction of this kind.

The question of the establishment of these reserves has been put to us several times over the year, and has up to the present time been successfully resisted. The Minister is now adamant, and within his rights under the Act. To meet the overdraft reduction deadline, we are at present engaged in a greatly accelerated export programme; I am glad to be able to say that this is being done without any serious drop in our realisations overseas.

It is also pleasing to record Ministerial acceptance of the final payment on the Pleasant Point property last year as being equivalent to an appropriation to reserves, and it can be assumed that any further similar appropriation with respect to Hornby will also be so regarded.

In each of these packing plants, the industry's funds are put to a much more profitable use than they would be in reserve account.

Following the purchase of the two South Island Branches, complaints were made to Government that the Authority enjoyed an unfair advantage over private packers by virtue of our credit being at one per cent.

That portion of our overdraft which is presumed to bear on our New Zealand business bears interest at 5½ per cent — still a concessionary rate.

The original \$180,000 at one per cent remains unchanged.

While the increased rate does nothing to help us increase the pay-out, its effect should not adversely affect the operations of the Authority, provided our annual intake remains reasonably constant from year to year, and we can still finance within the limits set by Government that carry-over of stock from season to season which experience has shown to be so necessary to ensure continuity of supply.

In fairness to Government, I should say that apart from these overdraft requirements, the Honey Marketing Authority is subject to no Government direction whatsoever.

We have always been liable to this limited Government direction, and at last it is being imposed.

Finally, I would say that had the Authority not acquired the share it at present has of the local market, at the time that it did, it would have been impossible to comply with the financial limits imposed by Government.

Last year I mentioned that the Authority had initiated a move to export named floral sources honeys in bulk. This trade has grown rapidly throughout the year, and sales in bulk of KAMAHI, TAWARI, NIUE ISLAND HONEY, CLOVER, THYME, BUTTER-CUP among others, have been made in the United Kingdom, Australia and Japan.

It is gratifying to report that the **SCHOOL PROJECT** distributed through the **NZ Trades Alphabet** this year proved very successful. We understand the Honey Project met with more enquiries than any other entry, and the prizewinning project dealt with "The Story of Bees and Honey."

Overseas, we have undertaken a major re-labelling programme on our retail packs on the recommendations of our various agencies.

THE VIRTUES OF HONEY

Here is a service beekeepers' wives can render the industry.

Consideration is being given to the preparation of a new booklet which will detail the 101 ways in which honey can be used in the kitchen, not only for cakes and biscuits, but for meat dishes, drinks, ice cream flavoured, jellies and all the other applications which make beekeepers' wives masters of the art of culinary preparation.

Please send your favourite recipes to: The Editor, P.O. Box 3561, Auckland.

Tried and tested dishes are wanted which will encourage the uninitiated to use honey every day in every way in the preparation of food. Recipes need not be the original creation of the sender; some dishes prepared by our forebears have stood the test of time and will be needed for publication.

Acknowledgements will be made to the senders if publication is made, although where there are duplicates, some omissions will occur.

Rally round ladies, and send in your ideas by the hundred.

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CAUSES OF ADULT HONEY BEE MORTALITY IN N.Z.

By T. PALMER-JONES

Wallaceville Animal Research Centre, Department of Agriculture, Wellington.

SUMMARY

Adult honey bee mortality in New Zealand may be caused by pesticides, use of arsenic-treated timber in hives, bees collecting nectar from karakas or kowhais, and disease. These causes of mortality are discussed from the viewpoints of diagnosis and control.

INTRODUCTION

When a beekeeper observes unusual numbers of dead, or dying bees, near hive entrances, he is naturally concerned to discover the cause. The first, and most important, action he should take is to report the mortality immediately to his local Apiary Instructor who will visit him to arrange the forwarding of samples and a case history to the Wallaceville Apiculture Section.

Adult bee mortality in New Zealand may be due to the following major causes.

PESTICIDES

When poisoning of bees by pesticides is suspected the following factors should be borne in mind. Symptoms of poisoning cannot be distinguished from those caused by certain diseases, or poisonous nectar from some plants; most poisoned foragers usually die away from their hives; and birds often pick up dead bees in apiaries.

The first essential is for the beekeeper to collect immediately up to 500 dead, or dead and dying bees, the optimum number required for chemical tests, and store them in a deepfreeze pending dispatch to Wallaceville. The Apiary Instructor and beekeeper will then compile a case history paying particular attention to recent local applications of pesticides and forward this, together with the sample of bees, to Wallaceville. In addition, a sample of live bees is dispatched in a new queen cage provided with candy. Should bees in the last prove negative for adult bee diseases the original sample is examined chemically for pesticides. Chemical analyses cannot be undertaken lightly because they are time-consuming and performed by highly skilled staff in short supply. The case history can be of great help at this stage by narrowing down the field to at least a particular group of pesticides.

New Zealand beekeeping is guarded by the Apiaries Act 1969, which provides that, during the period September 1 to March 31, sprays or dusts toxic to bees shall not be applied without a permit to cruci-

ferous or leguminous field crops when in flower, or when flowering plants that attract bees are present in these crops. In addition the Act includes a provision banning applications of pesticides to flowering fruit trees and small berry fruits. The Wallaceville Apiculture Section backs these provision with an active experimental programme of field and laboratory tests aimed at finding pesticides that can be used to control pests effectively without harming bees. Wallaceville maintains liaison with pesticide firms; the Agricultural Chemicals Board which registers pesticides and controls their sale and use; the representatives of the beekeeping industry; and Apiary Instructors. Thanks to the co-operation between these interests serious bee mortality has not occurred since 1955.

There is no restriction on the number of samples that may be submitted for chemical examination from hives suspected of suffering from pesticide poisoning provided they are forwarded, together with a case history, by an Apiary Instructor.

Five samples were submitted in 1969, two from single hives showing mortality, and three from individual apiaries of which only one was severely affected. Lindane was detected in a sample from one of the single hives which had been placed in an orchard for pollination. The sample from the other single hive proved negative for the suspected pesticide. In one of the cases, a weedkiller, claimed to have caused slight mortality, was shown to be non-toxic to bees, the weakness of the hives being due to causes other than pesticides. The two other samples submitted were checked for a large range of pesticides with negative results, and again mortality appeared due to other causes.

In the past mortality attributable to pesticides was much greater, and pesticides were identified in over half of the cases. Although severe pesticide poisoning is now rare, beekeepers are more ready to send samples to Wallaceville if its occurrence is suspected. We welcome this greater interest, and the confidence shown in our diagnostic service, and hope it continues.

ARSENIC-TREATED TIMBER IN BEEHIVES

When treated with wood-preservatives containing arsenic both rough sawn timber, and timber subsequently machine dressed, has been shown to cause bee mortality and to reduce honey yield seriously. The ingestion by bees of arsenic compounds from the inner hive surfaces continues for years after treatment. Bee mortality is severe, especially during the cold months of the year, when moisture condensation on the inner hive surfaces is greatest. As shown in trials at Wallaceville the consequent demoralisation within the hives leaves them open to attack by robber bees.

Poisoning of bees from arsenic-treated timber still occurs although beekeepers have been warned repeatedly of the danger in using such timber. In 1967 we detected arsenic in dead bees from a hive of a beekeeper who treated his equipment with an arsenic wood preserver. Arsenic was found again in dead bees submitted in 1968 from an apiary where

severe mortality was occurring. The beekeeper had treated his bottom boards with an arsenic wood preserver.

When Apiary Instructors investigate bee losses they make inquiry to ascertain if arsenic-treated timber has been used in the hives. If it has been used dead bees are forwarded to Wallaceville for an arsenic examination.

There is no satisfactory way of rendering arsenic-treated hives safe by treatment, or by painting over the inside surface which comes in contact with bees. Such equipment must be destroyed or used for other purposes.

NECTAR FROM THE KARAKA TREES

The karaka tree (*Corynocarpus laevigata*) is widely distributed in the North Island, and to a lesser extent in the northern part of the South Island. Karakas bear a mass of flowers which secrete nectar copiously, rendering them very attractive to honey bees. Furthermore, the flowering period, August to December, is one when other sources are often scarce, so bees from hives within range of trees may visit them in large numbers.

In an investigation of serious losses, in the spring, of adult honey bees in the Hawke's Bay area, the Apiculture Section of Wallaceville found that nectar from karakas caused the mortality. Karaka nectar is toxic only to adult bees; we have no evidence that the tree's pollen is dangerous. Mortality may be very heavy, the author having collected more than 4,000 dead or dying bees from a severely affected hive.

A high incidence of spring adult bee mortality, sometimes sufficiently severe to reduce honey crops seriously, was often reported in the Auckland and Northland districts. The losses were usually ascribed to the use of pesticides. In 1962 the mortality was studied, from onset to cessation of symptoms, in four apiaries on Motutapu Island, 17 apiaries in the Helensville and Waiuku district, and nine in Northland. Pesticides had not been applied within bee range of these apiaries before losses occurred. Sufficient karakas to account for the mortality were found within bee range of all affected apiaries. Bees were observed collecting nectar from the karakas, and it was abundantly clear that mortality was the result solely of poisoning with karaka nectar.

Symptoms of karaka poisoning of bees are indistinguishable from those caused by pesticides or arsenic wood preservatives. Unfortunately, no chemical test is available for karaka poisoning. Therefore, when mortality occurs in an apiary during the flowering period of karakas it is vital to search for karaka trees within bee range. The man in the field is the only one who can determine whether or not karakas are responsible. The trees in a grove of karakas normally flower at different times so bees may collect the toxic nectar for weeks. Mortality may, therefore, be much greater than from a pesticide which is applied only once, and causes mortality for a few days at most. The danger from karakas is much underrated, and I am convinced that many inexplicable cases of

bee mortality referred to Wallaceville as due to pesticides are caused by karaka poisoning.

Destruction of karakas is not feasible or warranted. Hence the only practical way to deal with the problem of karaka poisoning is to resite apiaries, or move them out of bee range of karakas during the flowering period.

NECTAR FROM THE YELLOW KOWHAI

The yellow kowhai (*Sophora microphylla*) is a copious secretor of nectar and very attractive to honey bees. It is distributed throughout New Zealand and flowers from July to October. In the South Island, where it abounds, it is one of the earliest spring-flowering plants.

Bee mortality in apiaries near flowering yellow kowhais has been observed in several South Island, and one North Island district. Widespread toxicity tests on kowhai nectar, collected by pipette from flowers, have established that the nectar may have a narcotic effect on bees. Only adult bees are affected. This may be followed by mortality if the narcotised bees are exposed to the low temperatures common in the spring.

The yellow kowhai flowers earlier than the karaka, and the spells of cold weather sometimes experienced in the spring, particularly in the South Island, may cause nectar secretion to cease. We have found that, unlike karaka nectar which is invariably highly toxic, kowhai nectar does not always cause narcosis or mortality.

The yellow kowhai is less likely than the karaka to cause bee mortality in the spring. However, on occasion it may cause serious losses indistinguishable from those caused by pesticides. Therefore, as for karakas, the district within bee range of an apiary showing spring mortality should be searched for yellow kowhais. This is particularly important because we cannot detect kowhai poisoning by chemical means.

BEE DISEASES

Acarine disease, *Malpighamoeba*, *Nosema*, and paralysis, are the only diseases that would be likely to cause the appearance of unusual numbers of dead or dying adult honey bees in an apiary.

In cases of adult bee mortality the local Apiary Instructor dispatches a sample of live bees, in a new queen cage supplied with candy, to Wallaceville. This sample, supplemented if necessary by further ones, is used for the diagnosis of adult bee diseases.

Fortunately, in spite of extensive research, acarine disease, caused by the internal mite *Acarapis woodi*, has never been found in New Zealand. Only one case of *Malpighamoeba mellifica*, which is caused by an amoeba infecting and damaging bees' malpighian tubes, has been discovered.

Nosema apis, a protozoan intestinal parasite may, on rare occasions, cause hive mortality. However, under our conditions, *Nosema* rarely builds up to dangerous levels in hives. Chemotherapy is not recommended for severely affected hives but these should be strengthened, requenced if necessary, and soiled combs removed and fumigated with acetic acid. These measures will reduce the incidence of *Nosema* to a tolerable level.

Bee paralysis, caused by a virus, has been diagnosed by Wallaceville on a few occasions as the cause of mortality in hives. We do not regard bee paralysis as causing serious losses of bees.

CONCLUSION

The diagnostic service of the Wallaceville Apiculture Section can function efficiently only if it receives a full case history concerning the samples submitted. The case history is of little value unless compiled as soon as possible after mortality has occurred.

Case histories should be prepared by Apiary Instructors with the possibility in mind that the adult bee losses observed may be due to:

Pesticides

Use of arsenic-treated timber in hives

Bees collecting karaka nectar

Bees collecting yellow kowhai nectar

Bee diseases.

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	2 lb	3 lb	4 lb and 2 Queens
October 1—7	\$4.10	\$4.80	\$8.10
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4 lb with 2 Queen Packages are designed to save freight.

Cages 40 cents extra. Full refund on return in good condition. All prices are plus freight charged at airfreight rates. For calculation of freight allow 6 lb per 2 lb pkge, 7 lb per 3 lb pkge, and 8 lb per 4 lb and 2 Queen pkge.

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PLASTIC BAGS TO HOLD MAINTENANCE or STIMULATIVE FOOD IN BEEHIVES

by

Keith M. Doull and R. A. Winn
Waite Agricultural Research Institute
Adelaide, S.A.

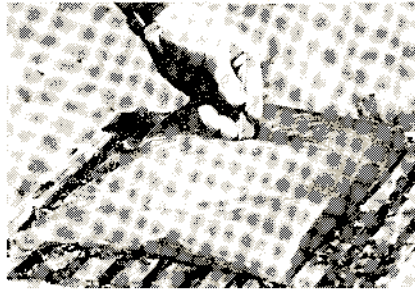


Fig. 1. Punctures are made on the top side of the bag with a sharp nail.

INTRODUCTION

Traditional methods of providing sugar syrup or honey for stimulative or maintenance feeding of honey bee colonies have disadvantages which limit their usefulness in large scale commercial beekeeping.

Searching for an alternative method of feeding colonies in our experimental apiary we found that plastic bags are suitable containers for both honey and syrup and are convenient for use in hives of any size or in beekeeping operations on any scale.

HOW TO USE PLASTIC BAGS

Bags made of 0.10 mm polyethylene should be used to provide honey or heavy syrup as maintenance food. Bees will chew through this plastic in time but it usually remains intact until most of the food has been used. Thin syrup may be fed in bags of 0.05 mm polyethylene since stimulative foods are expected to be taken down into the combs in a few days.

Plastic bags 30 cm x 45 cm will hold 5 kg of honey and may last a strong colony up to five weeks. Five litres of syrup may be supplied in a bag of these dimensions.

Syrup or honey is poured into the bags until they are half to

three-quarters full. Any air remaining above the food must be squeezed out before the bags are sealed. This is best done with a heat sealer but the tops of the bags may simply be twisted and tied with rubber bands.

It is important to remove the air from the bags. If there are pockets of air above the food the plastic will be held away from the contents which are then inaccessible to the bees. As the food is used up the plastic should collapse and remain in contact with it.

The filled bags are placed on top of the combs and feeding punctures are made in the *Upper Surface Only*. These punctures are made with a spike such as a

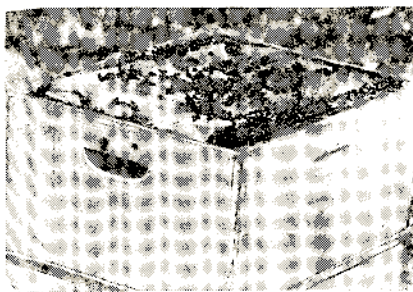


Fig. 2. As the bees feed the plastic collapses and there is no waste.

sharpened nail (Fig. 1).

The number of feeding punctures will depend on the strength of the colony and the rate at which the bees are expected to obtain the food. Five or six punctures are adequate for maintenance feeding with honey, but the number should be increased for stimulative feeding.

The rate of feeding should be increased by making more feeding punctures and NOT by enlarging the holes. 6-10 bees will feed round a puncture at one time but if the holes are too big, bees will crawl into the bags and die there.

Plastic does not stretch appreciably and so the syrup or honey is not under pressure and will not leak out. As the bees feed and the plastic collapses there is little waste.

ADVANTAGES OF PLASTIC BAGS

The main advantage of plastic bags is that they enable the beekeeper to vary and control the rate at which bees receive the food.

This is particularly important

when sugar syrup is provided as stimulative food.

If a colony takes the syrup too fast the bees become over-stimulated. They then begin to fly in search of the "nectar-flow" and this frequently initiates robbing.

Plastic bags provide an ideal method for feeding honey to bees. In Australia some lines of honey are much cheaper than sugar, and it is sound economics to feed these honeys back to the bees after removing all the top-grade honeys from the hives. It is also more convenient to feed liquid honey than to store combs of honey against future needs.

The bags may be filled at the home plant and taken out to the apiaries so that the time spent in the apiary is limited to that needed to lift the lids of the hives and place a bag of food on the combs. Since no syrup or honey is exposed in the apiary and none need be spilled in the hives, there is less likelihood that the bees will begin robbing, and there is less to attract ants.

Plastic bags have been used to provide water to hives in cages but, although this shows some promise, it needs further study.

CONCLUSION

The use of plastic bags was developed during the summer of 1964-65 as a method of feeding colonies of bees in lucerne pollination cages. It is now used in the experimental apiaries for all types of hives and at all times of the year. The method is particularly suited to commercial beekeeping in Australia and has become standard practice for some beekeepers in South Australia.

A BATTERY OPERATED VACUUM BEE COLLECTOR

By

P. G. Clinch, Scientist, Wallaceville Animal Research Centre,
Department of Agriculture, Wellington.

Last year, during experimental work at Wallaceville, it became necessary to collect samples of bees from 14 hives at frequent intervals. While it is relatively easy to take samples from hive entrances, for this work samples were required from the combs, a much more difficult task. The use of a hand-operated suction device of the type described by Bailey (1956), although fairly satisfactory for taking one or two samples proved too laborious and time-consuming for collecting more. It became apparent that a battery-operated electric vacuum device would be ideal for the work, but to have a model custom-built would be very expensive. However, it was discovered that vacuum cleaners, powered by a 12 volt car battery, were available for under \$12 retail. It was decided to attempt to convert one into a bee collector.

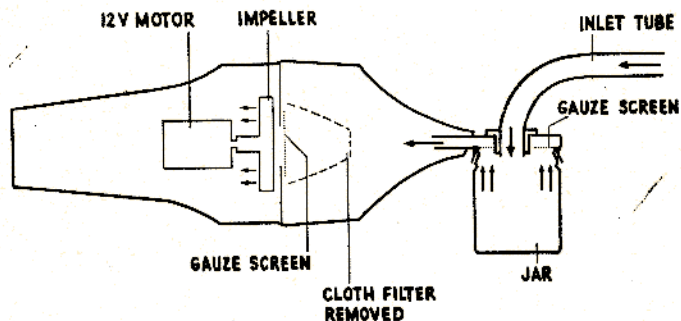


Fig. 1. Cross section of "Car Vac" and small jar adaptor.

The first model to be converted, the "Car-Vac", was obtained from Motor Specialities Ltd., Wellington. An adaptor into which a 2 fl. oz. jar could be screwed, was constructed to fit into the nozzle of the cleaner (Fig. 1). The galvanised iron body of the adaptor was soldered to a modified jar lid. The centre of the lid had been removed, leaving a 3/16in. rim around the edge, to which was soldered wire gauze 10 mesh per inch. The nozzle (4 in. in length) of the collector was made of 3/8in. internal-diameter glass tubing, bent at right angles, and passing through one hole in the top of the adaptor body, and another in the gauze over the lid, to protrude approximately 1 in. into the jar. To increase the air flow, the cloth filter in the cleaner was removed and a piece of wire gauze glued in its place to protect the impeller. The apparatus operates by sucking bees, one at a time, up through the glass nozzle into the jar, where they

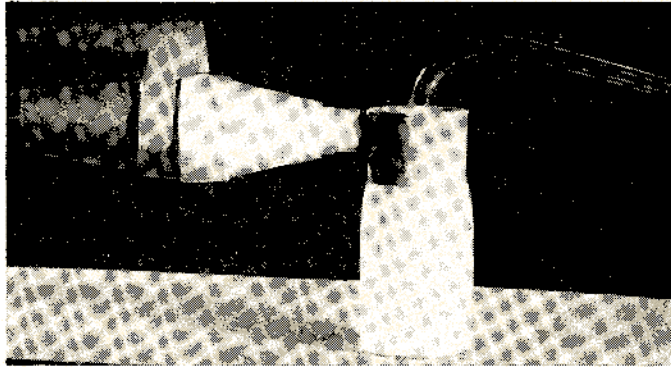


Fig. 2. "Turtle" car vacuum cleaner with large jar adaptor.

are retained by the gauze over the lid. When sufficient bees have been collected, the jar is unscrewed and a lid quickly slid over the top. In use, it was found that when bees were collected from the combs during a honey flow, the glass nozzle became sticky with honey which impeded the passage of bees up the tube. Frequent replacement of sticky tubes by clean ones overcame this problem.

A second unit was required, and as another "Car-Vac" could not be obtained, a "Turtle" Car Vacuum Cleaner was purchased from Lamphouse, Wellington. Although this

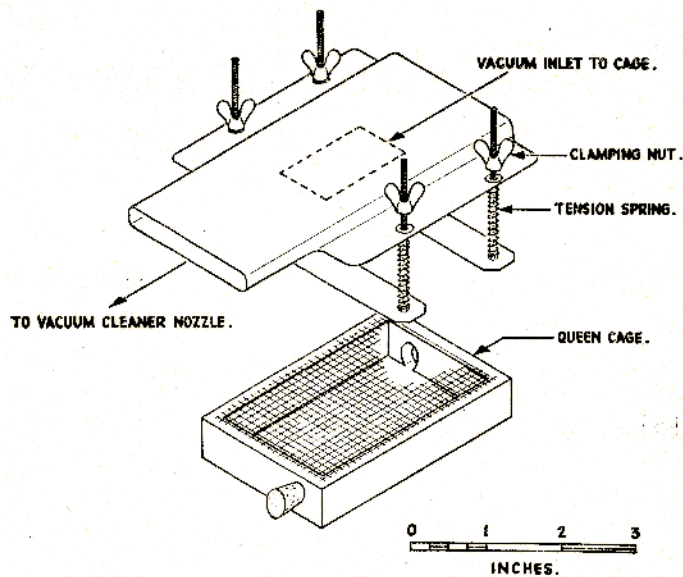


Fig. 3. Queen cage adaptor for "Car Vac."

model is basically similar to the "Car-Vac", and could be modified in the same way, the nozzle differs, preventing the interchange of adaptor between the two types. As the "Turtle" was required to collect samples consisting of several hundred bees, an adaptor was constructed to hold a one-pint container (Fig. 2).

The ease with which bees can be collected with the apparatus led to the construction of an adaptor to enable bee collection to be made directly into queen cages for diagnostic purposes. This device (Fig. 3) enables the collection of bees in 6-hole wooden, or the new polystyrene, queen mailing cages, without handling, and with minimal risk of cross-contamination. As collection does not injure the bees, the method may also have possibilities for charging queen cages with escort bees.

The use of electric vacuum devices for collecting insects is not new, publication on the subject dating back to 1933. Nevertheless, when preparing this article, it was a surprise to receive a paper, just published, which showed that a scientist in the U.S.A. had, quite independently, used a car vacuum cleaner to collect bees (Jaycox, 1970). However, the design and use of his device differed from that described above.

ACKNOWLEDGEMENTS

The author wishes to acknowledge the help of the following members of the staff at Wallaceville: Mr T. Palmer-Jones, who gave advice throughout the work; and Messrs. A. W. Barkus and J. Bellamy, who prepared the photographs and diagrams for the text.

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Our intake of honey, better than two thousand tons in each of the last two years, indicates substantial support by producers. Our local sales this year are slightly down, whereas the export figures show a marked rise — the Authority does recognise its responsibility as an exporter.

Government has agreed to successive and substantial rises in our overdraft accommodation, to finance the purchase of honey stocks. The acquisition, and successful operation, of the two South Island packing plants has substantially increased our throughput with a consequent reduction in overheads and at the same time given the industry a far greater measure of producer control, both at home and abroad.

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J. W. FRASER.

PREVENTIVE FEEDING OF FUMAGILLIN TO CONTROL NOSEMA APIS in Special Cases *

by

T. Palmer-Jones,

Wallaceville Animal Research Centre, Department of Agriculture, Wellington.

SUMMARY

Treatment of apiaries, or individual hives, with fumagillin to control Nosema apis is not recommended because of the cost and the time-consuming fumigation of combs which is necessary. However, fumagillin may be fed with advantage in three special cases where conditions render queen bees liable to infection. These are hives providing bees either to escort queens overseas, or for the Foti method, and hives supporting queen banks.

INTRODUCTION

Nosema apis Zander, a protozoon parasite of adult honey bees, is spread by spores present in excreta which is cleaned up by the bees. Drones, worker bees, and queen bees may be attacked by the disease which weakens field bees and may cause symptoms of dysentery and distress (Palmer-Jones 1967).

Nosema spores will eventually be found in most New Zealand apiaries if sufficient bees are examined. However, under our conditions, the parasites rarely build up to dangerous levels in hives. Beekeepers who suspect their hives may be affected by the disease should ask their local Apiary Instructors to forward samples to Wallaceville for examination. Severely affected hives should be strengthened, and requeened if necessary. Soiled combs should be removed and fumigated with acetic acid, prepared and used as described below. Soiled hive mats should be burned. Hives on damp apiary sites should be relocated on warm, dry ones.

FUMIGATION WITH ACETIC ACID

Dormant spores of *Nosema*, in combs or on their surfaces, spread the disease and should be destroyed if control measures are to succeed. Fumigation with 80 per cent acetic acid is recommended. This can be prepared by adding one part by volume of water to four parts of commercial glacial acetic acid. The combs are piled up in supers separated by layers of absorbent material. Then about 1/4 pint 80 per cent acetic acid is poured on each layer of material. Before the combs can be used the stacks must be left for a few days and then well aired. Strong acetic acid is corrosive and should be handled only when the hands are protected by rubber gloves. Its vapour corrodes metal such as frame wire and nails, but is harmless to honey and pollen.

TREATMENT OF NOSEMA WITH FUMAGILLIN

The most outstanding drug for *Nosema* control is the antibiotic fumagillin, marketed under the trade name Fumidil B. This drug has no effect upon the spores of *Nosema*, only upon the growing stage. After fumagillin has been consumed, re-infection usually soon occurs from spores in the hive. Fumigation of combs with acetic acid is necessary before treatment of much benefit is to be derived from the drug.

Fumigillin is expensive, and fumigation of combs time-consuming and tedious. Consequently, treatment of apiaries, or individual hives, with fumagillin to control *Nosema* is not warranted as pointed out in this Journal by Palmer-Jones (1967). However, since 1967 a large export trade in queen bees has developed, and beekeepers have become interested in the Foti method of storing queens, and in queen banks.

Limited numbers of bees carrying spores are often found in healthy colonies, where their presence is not significant. However, it is desirable that all bees escorting export queens should be free from *Nosema*, to prevent the queens becoming infected in the conditions of long confinement and stress they experience before introduction into hives overseas. Therefore, when examining samples of bees forwarded to Wallaceville from hives set aside to provide escorts, the presence of only a few spores necessitates classification of the samples as positive.

Fumagillin could, therefore, be used with advantage to treat hives providing escort bees for queens despatched overseas. It could also be fed to hives providing bees for use in the Foti method of storing queens, and to hives supporting queen banks.

METHOD OF FEEDING FUMAGILLIN

Great care is necessary to prevent fumagillin reaching honey sold for human consumption, and it should not be fed immediately before or during a honey flow.

The combs of treated hives should be fumigated, as described, with acetic acid prior to feeding.

Fumagillin is available as Fumidil B, in 0.5g and 9.5g bottles costing about \$2 and \$28 respectively in New Zealand. The Fumidil B should be fed to hives in a concentration of 0.1g per gallon of sugar syrup (2 parts sugar in 1 part water). The sugar syrup should be prepared first and allowed to cool before the Fumidil B is added. No heat should be used after the drug has been added. It is best to feed the medicated syrup immediately after preparation, but if necessary it may be kept in a cool, dark place, or preferably a refrigerator, for up to 10 days. Fumidil B should be stored in a refrigerator. Three treatments, each of 1 gallon, should be given at ten day intervals.

Treatments should conclude shortly before withdrawal of bees for use

(continued on page 45)

COMMENTARY

from the Editor's Desk and Mail



THE MINISTRY OF AGRICULTURE in the UK has shown common sense in refusing the request of a Yorkshire council's demand that rose bay willow herb (*epitolum angustifolium*) be controlled as a noxious weed. It was pointed out that this attractive free flowering plant is no threat to agriculture, and there is no reasonable ground for ordering its destruction.

During the war, when buildings were raised to the ground in air raids, the first colour on nature's canvas when the site had been cleared was willow herb. Londoners used to wonder how it was possible for the deep pink blooms to appear so quickly on ground that had not been cultivated for donkey's years.

Whether the seed was wind blown from the countryside some 30 miles away or brought by birds is a matter for conjecture. Some thought the seeds had been dormant in the ground waiting for sun and rain to bring them to germination. Whatever the reason, the pink and green covered some ugly scars and in the woods of Buckinghamshire, Kent, and Surrey on the outskirts of the metropolis, willow herb provides good sources of nectar for bees.

It is an oddity of human nature that some people must kill anything that moves, or destroy growing things not of their precise choosing.



SUGAR FEED FOR BEES, supplied duty free in the UK and dyed a shade of green to prevent wrongful application, is still in the beekeeping news. Readers will recall the report in the February edition in which mention was made of the dye causing problem in discolouring honey even in the supers, where the bees had carried spring feed 'up top' for unexpected reasons.

The Ministry of Agriculture has now given manufacturers permission to offer for sale 'denatured' sugar which is pure white refined sugar with an addition of 500 p.p.m. of sucrose-octo-acetate and no dye. Additionally, 2½ per cent of fishmeal with 1 per cent of high viscosity swelling starch is included to give an objectionable taste should humans decide on a little clandestine attempts at jam making. Whilst it is said that the fish smell disipates in time, one wonders whether this is a certainty and if there is much to choose between honey spoilt by a dye or humming from fish.

Packed in 56 lb 5-ply bags at 59s/6 per cwt. ex store at Liverpool, delivery charges are additional at 9s/0d per cwt. for lots of half a ton, reducing to 6s/0d per cwt. for 10 tons.

★ ★ ★

A BEEKEEPER IN TROUBLE on the main M1 motorway near Leicester, England, caused a furore, not with his bees, but through the common sense act of a patrolling AA scout.

24 colonies of bees were being returned from the heather, when the clutch of the truck broke down. Fearing that the bees might escape and cause trouble to high speed traffic on the motorway, the AA scout very reasonably decided that it would be right and proper to infringe a traffic rule by using a 'no-exit' road instead of driving to the nearest 'authorised' exit 10 miles away.

However, the law is the law even if it is an ass, and a zealous police officer had the patrolman and the beekeeper as an accessory hauled before the court. The magistrates in their undoubted wisdom deemed that the action of the patrolman was indeed an emergency and dismissed the charge against the defendants, awarding £25 costs against the police. Right triumphed over might.

★ ★ ★

THE BEEKEEPERS SECTION of the Farmer's Union held in Perth, Australia, supported the recommendation that the sole agent for the marketing of Australian honey in the UK be supported. The Conference could see no point in having two agents as at present.

★ ★ ★

A CONTRIBUTOR to "APICULTURE", the journal of the W.A. Department of Agriculture claims that a sales approach is based on five words — *sympathy, appreciation, product, interest and desire*. Taking the first letter of each word the word composed is SAPID which, in the English Oxford dictionary means "Having flavour". There is sense in this injunction in selling our cherished product.

HONEY PRODUCTION for 1969 in the US totalled 283,268,000 pounds — 42% above the 1968 crop. Produced by 4,762,000 colonies, the average yield was 59.5 lbs per colony; 18 lbs more per hive than in 1968. Bees wax yield was 5,460,000 lbs, an increase of 38% on 1968.



E.F.B. is described as a growing menace in the US and beekeepers are reminded of the epidemic which swept the States in 1900. A contributor to GLEANINGS reminisces that his boss in 1925 told him of earlier losses wherein his stocks of 600 colonies were decimated to 200 within three weeks. Susceptibility of the black or German bee to disease carries the blame. Efforts in Mexico to control the disease with terramycin have not proved lasting; the disease appears to disappear but after the honey flow even greater trouble is experienced. Some yards had an infection of 70% with EFB, 20% with AFB and 5% chalk brood. The remaining 5% had a clean bill of health. NZ apiarists must count their blessings.



ARGENTINE is expressing alarm at the spread of the aggressive African bee from Brazil where, even allowing for press exaggeration *apis mellifera Adansonii* has become a problem. As a robber and aggressor it has no equals. We must be glad that import restrictions minimise the possibility of entry into NZ. There can be no doubt but that any knowledge one might gain of illegal importation of any specie by a 'clever dick' must be reported to the authorities for immediate and positive action. This would not be the action of a 'tell-tale' but the bounden duty to the industry.



LEAFCUTTER BEES. Wise minds do not always think alike, as may be evidenced by the report from the Commercial Apiarists' Association of NSW which claims that the importation of the specie cannot help but be to the disadvantage of the industry. Fears are expressed that they may introduce disease — though this has been repudiated by responsible scientific opinion — or develop to pest proportions, or that they would compete for pollen when supplies are not plentiful. The report claims that not one advantage can be seen amongst all the possible disadvantages.



THE JOURNAL OF ECONOMIC ENTOMOLOGY 62: 1185-6 SPANGLER, Hayward G. reports that flights may be induced to stay at home and 'freeze' when suitable vibrations are caused in the vicinity of the hive, and that a practical application could be applied to pesticide operations, thus reducing mortality by 80%. The research is in its experimental stage and is not yet practical.

VINCE COOK of Oamaru, popular Apiary Instructor for that district who was posted to Christchurch as Apiculturist by the Department of Agriculture, is back again in his old stamping ground. Personal and family reasons are understood to be the reasons for the reversion. Bee-keepers in North Otago will certainly be glad to see him back. Otago's gain is Canterbury's loss.

HAVE YOU TRIED [★] the new way [★] of selling [★] honey? According to a report from London, a new book published with Miss Barbara Cartland as the author claims that honey is the ideal aphrodisiac when mixed with a herbal concoction to produce an 'elixir of life.' Those closely connected with the industry will know for themselves the truth or otherwise of part of Miss Cartland's claim, but suffice it to say that honey sales have quadrupled since the book THE MAGIC OF HONEY was discussed on television, and wholesalers have had difficulty in supplying the retail, and producers the suppliers. Perhaps we could import a few thousand copies of this book and obtain a guinea pig for television here if sales can be made to increase that quickly, quite apart from any other desirable effects. Some there are who claim that a spoonful of honey at bed time induces sound sleep; now it seems that the addition of a mysterious 'something' helps to keep the experimenter awake. Perhaps the fault has been in only taking a dessertspoonful at night; who knows what might happen with a half pound tin! Whatever the individual outcome it seems obvious that here is one way to clear the local market of surplus stock. An airmail request has gone off to London for a review copy; further information will be provided.

IN A LECTURE [★] to the International Beekeeping Congress, A. S. Jakovlev of the USSR said that experiments with cobalt over a period of three years showed that a dose of 4 to 8 mg per litre of sugar solution in spring, reared 19-29% more brood. Autumn feeding of cobalt in sugar solution gave 12.5% more brood than in the control colony. Colonies given supplementary feeds of sugar and cobalt produced 30-35% greater honey production. According to the report the solution fed when there was a scarcity of nectar resulted in the bees consuming the total feed and none was stored. Pharyngeal gland development was greater as was the consumption by larvae resulting in greater live weight and size. Income was increased by 25 roubles per colony (1 rouble = 1 NZ\$).

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HONEY MARKETING IN GERMANY has been arranged by the Australian Honey Board to be placed in the hands of two sole agents, one representing private traders and the other the co-operative movement. In a statement, the Chairman, Mr. K. A. H. Read stated with the possibility of the UK entering the Common Market which would lose the Commonwealth Preference of £5 per ton duty over honey imported by the UK from countries outside the Commonwealth, it was essential for the Board to negotiate the agreement now concluded, and it was felt that Australia's 46 licensed honey exporters would be secure in their representation in the world's largest market for honey. Pointing out that Germany imports 47,000 tons of honey annually, the Chairman said that both German agents had agreed to act jointly in much the same way as joint agents appointed by the Board for the UK and Eire in 1967. Higher values and stable prices had resulted from the UK Agreement, and 80% of Australian exported honey went to the UK. Lower prices in Germany were blamed on inadequate Australian representation and lower prices offered from elsewhere and China in particular.

★ ★ ★

IF STATISTICS are anything to go by, America cannot be very sweet toothed or educated as to the merits of honey as nectar for the Gods. According to Pickle Packers International, which promoted March as 'Hamburger and Pickle Month' ten million hamburgers a day were expected to be sold in that month. Average per capita consumption in the US is 26 lbs of hamburger and 7.3 lbs of pickles. Average consumption of honey is a miserly 1.1 lbs per head. There's food for thought there.

★ ★ ★

RECOMMENDED POLLINATION FEES by the British National Pollination Service in the UK for 1970 are £3 12s. 6d. per colony, an increase of 9s. over the previous year. Suggest that you carry this cutting with you to show NZ farmers who need pollination services just as much as in the northern hemisphere.

★ ★ ★

WASHINGTON STATE inspectors in the US are having trouble with toxicity due to nectar from mountain laurel (*Kalmia latifolia*) and five people reported sick with symptoms of respiratory difficulty, blurred

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vision, slight paralysis of extremities and some nausea. Analysis proved the presence of andromedotoxin with the nectar, and local stocks were destroyed under supervision.



FIRST FLYING BEE man to attend Conference in control of his own wings is probably Kevin Ecroyd of Christchurch, who pointed his nose northward from Christchurch to Auckland in a Canterbury Aero Club's plane, accompanied by his trusting wife, a Club aero instructor and another guest. Time logged on the trip counts as flying hours towards Kevin's acquisition of coveted private pilot's licence. Happily, the flight to Auckland and return was made without incident.



A WELL INTENDED suggestion made at Conference was that the NEW ZEALAND BEEKEEPER should be free from pressures from outside sources, and that publication should be entirely at the expense of the NBA. Democratically, the editor was invited to state his views, and to enable readers generally to know the situation, re-iteration of the journal's policy is recorded here in print.

During the present editor's occupancy of the editorial chair there have been no instances of undue pressures brought to bear by organisations or individuals.

An editor must reserve his right to think and act completely independently consistent with the laws of the land and respect for other people's points of view. He does not make news, neither must he exploit a situation beyond its worth or magnify its importance. His responsibility is to assess a situation or circumstances which affect the industry and to try to give unbiased interpretation of events as he sees them. He is not infallible and must make mistakes. His thinking must, of necessity, be influenced by prominent members of his industry. Influence and pressure are two entirely different situations. Whilst influence is acceptable, pressure is not.

An editor must be completely free to criticise government departments, individuals, organisations, publications or himself if the circumstances so dictate but, at the same time, he must accept responsibility for such criticism and to be able to justify his comments if they are called into doubt.

Freedom of the press is overworked phraseology often open to doubt as to its veracity in certain quarters. Readers of this journal can at least be assured that the columns are open to any writer of what ever shade of opinion provided it is of interest to the industry and within the laws of libel and common decency. If the day should ever dawn that this policy was compulsorily changed, this editor would choose to sit on the floor and not the chair.

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LOVE SEEMS TO BE GETTING INTO THE ACT where honey is concerned in more than one quarter, and the German magazine 'DER STERN' of Hamburg publishes the following appropos New Zealand honey. Headed 'HONEY FOR LOVE' the editorial recommends: "Not only for health reasons is honey loved. Feready Ovid recommended the Sunday breakfast to comprise honey and eggs, but the old Roman way was to mix both together. However, I can suggest a snob way of enjoying three different kinds of honey from New Zealand packed in pretty, practical, synthetic containers which do not stick and which are presented in a gift box of 750 grms each. The honey is derived from Lotus, Kamahi and Manuka. The flower of the Lotus is pleasantly sweet like a honey comb, whereas the flower of the Kamahi, a mountain plant, is smoother and blossomlike. The Manuka flavour is stronger, more exotic and the colour dark. All three honeys are middle soft and melt on your tongue." The paragraph continues to inform readers of the proportion of honey imported as against home production and certainly gives our product a good boost.

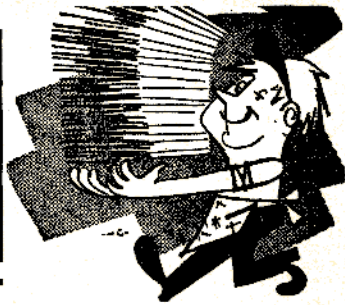


THE OTAGO BRANCH has been in the doldrums for some time and welcome it is indeed to see that new life has been injected by their recent activities and the reporting by Secretary B. D. Norton in this issue. Branch notes are of interest to members way beyond the confines of local areas, and secretaries are again reminded how welcome their reports are for publication. With unflinching regularity a postcard is sent out each quarter to every branch secretary asking for information. If news of your branch is not published, please prod your local man in the ribs and ask him for co-operation. To those regular and reliable scribes who send in their district reports, a word of thanks from us all for an unpaid job well done.



HONEY CARTON manufacturers Frank Winstone Ltd. have donated \$50.00 to the NBA for application by the Executive to a named project, and their gift is appreciated.

BRANCH NOTES



NORTHLAND

The Northland Branch Annual General Meeting was held at the end of May. The Auckland instructor was present with slides on general beekeeping which were very interesting and instructive.

We are having a very mild winter to date with below average rainfall and the result is that the bees are working and bringing in nectar of some sort. The Manuka is flowering early this year but we may get a cold and wet Spring.

The entries were down in number at our A. & P. Winter Show this year but the honey was of high standard and we are hoping for larger numbers next year. The beekeepers are now working hard on getting supers and frames ready for the bumper season which is coming—we hope! Last season's crop was one above average with very little moisture content.

Our next Field Day will be held at Kaitia at Malcolm Haines' home yard on a date to be decided.

Reported by Arthur Tucker.

BAY OF PLENTY

Members met on two occasions recently, first for the Annual General Meeting and then for discussion on Conference Remits. The branch has a new President this year—Mr. A. C. Ward of Waihi.

Many branch members attended Conference in Auckland in July.

It was with deep regret that we heard of the death of Mr. L. G. Corbett of Katikati. Graham Corbett was responsible for convening the first meeting of the Bay of Plenty Branch many years ago and was the first President.

As well as being a very successful beekeeper, Graham had an inventive frame of mind. He invented a very successful four-wheel honey loader and

also a vibrating uncapping knife.

The sympathy of members goes to his wife Joan and their five children.

Four members of the branch went for a week's trout fishing to Lake Rototiti. Trout were in abundance—and so was the 'flu. "A" went to bed on Sunday followed by "B" and "C" on Wednesday and "D" on Thursday. By the end of the week all four were in bed—laid low with the trout having the last laugh!

Thoughts are already turning to the coming season. Five finger budding is good so in a few weeks we will be away to another season — and high hopes.

Reported by Don Barrow.

WEST COAST

Visitors thanks are due to Auckland Branch for their wonderful hospitality and for turning on a not too bad spot of weather.

Special appreciation is made to the manner in which Mr. D. Barrow conducted Conference over a multitude of remits and reports. He was not too liberal with time yet no one could claim that anyone was muzzled.

It would be interesting to speculate how many Conference visitors noted the floral source packs (not HMA) 150 yds from Conference Hall and the price?

Weather on the Coast this morning is cool to cold. Days have been mostly fine with rain up to quota, mostly at night. Plenty of fresh snow on the tops and on the Canterbury side.

Many nuclei will be very short of stores if keepers have not attended to them recently.

Blue Petticoat Fuschia is flowering and a few other second-growth scrub types are attracting bees during warm periods. It's time to move if we want it on the barrow.

Reported by Tom Holland.

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SOUTH CANTERBURY

The 1969-70 year will be remembered by South Canterbury beekeepers as one of the dryest on record with the result that honey crops were well below average.

Recent heavy falls of rain have improved the outlook for the coming season, but its too early yet to forecast the prospects for the coming season.

We have met in Timaru several times and had some interesting film evenings and we had a successful field day at the home apiary of Mr. H. Cloake of Fairview, Timaru. There was a large gathering of beekeepers present and after morning tea at 10 a.m. an inspection was made of the honey house and modern equipment.

A demonstration of extracting honey was shown by Mr. H. Cloake, using the Davidson uncapping machine. Later the Penrose uncapper was used and at the same time Mr. W. Tresize demonstrated a new honey pump. After lunch Mervyn Cloake gave a demonstration of electric welding and showed how it could be used to help the beekeeper in many ways in repairs to plant. This talk was followed with interest as was a talk by R. Davidson Junr. on safety with circular saws and planers, who showed how to use safety guards and how to avoid cutting off fingers which are so useful to a beekeeper!

Mr. Cloake gave a demonstration of a home-made bender for putting iron on hive lids which was very quick and effective.

After lunch Mr. V. A. Cook, Apiary Instructor of Oamaru, gave a talk on wintering bees with honey, followed by Mr. H. Cloake on wintering bees with sugar syrup. Both speakers answered questions and were thanked.

Mr. T. Pearson and R. Davidson Junr. gave us some useful tips on their methods of queen introduction which were interesting and helpful.

Finally Mr. R. Cloake demonstrated the many mechanical aids used by Cloakes Honey Ltd. such as bee blowers, mechanical hive barrow and lifts to help with the heavy work of a beekeeper. Afternoon tea provided by

ITALIAN QUEENS

1970—71

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

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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.

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

Mrs. Cloake concluded a most instructive and enjoyable day and our sincere thanks go to the Cloake family for making us welcome.

Reported by J. G. McKenzie.

OTAGO

Weather conditions were favourable in most areas with the exception of January which dashed the hopes of many for a record season. Clover flowered in abundance throughout, but with our dull, cold weather in January bees could not work.

For the Otago/Southland District, honey production was down on last season by about 100 tons overall.

In March a successful and well attended field day was held at Mr. Poole's property at Kyeburn in Central Otago. A cold wet day was more than offset by the warmth of hospitality and Mr. Poole's honey house. Mr. McKenzie, the Apiary Instructor, delivered an address on bee diseases, a subject of perpetual interest and importance. John Heimeman drove home that importance and demonstrated with actual hive equipment and fire the process for carefully and totally destroying a colony infected with bacillus larvae.

Apiary Instructor Vince Cook, from Oamaru, spoke on several methods of wintering queen banks, and there were Executive Reports on NBA and HMA activities. Mr. Herron, from the Southland branch made a worthwhile contribution to the day by describing the system he has developed to record colony manipulation and results. All in all a good day.

On the Tuesday following Queen's Birthday the branch held its annual Convention of Otago and Southland beekeepers in Dunedin. At the afternoon session NBA and HMA activities were reported by Messrs. Dickinson and Poole and Mr. Poole also spoke on the practical advantages he has found in having his business as a limited company.

At the evening session Mr. I. W. Forster of the Department of Agriculture, Oamaru, gave a most interesting and informative illustrated address covering that Department's work on the attractiveness to bees of the new 4700 strain of White Clover. A further illustrated talk by Mr. R.

Italian Queens

Bred in seclusion from tried and tested stock. Guaranteed true to strain and free from disease.

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If advice of despatch is required by telegram, please add 25 cents to your total purchase payment.
Queens are sent by airmail whenever practical.

LIMITED SUPPLIES WILL
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Queen Breeder and Rearer
P.O. Box 488
W H A K A T A N E
Bay of Plenty

Davidson of Timaru on North American beekeeping equipment and methods, as seen by him during his recent visit to that country, was appreciated. Once again the convention was an instructive, interesting and entertaining get-together.

The Branch is looking to ways to extend members' interest and participation in beekeeping activities and is initially proceeding to develop particularly the hobbyist section. Although this is in its early stages, it is very apparent that the desire exists and the very generous donation of hives, colonies and other equipment by association members towards the setting up of a Branch Apiary bodes well for the future success of the scheme.

At this time too, Mr. MacKenzie, the Apiary Instructor at Gore has plans well advanced for the formation of a Dunedin area hobbyist discussion group. He reports strong support for the formation of the group and now has the first meeting planned for late September. A class room at a local school with laboratory facilities is available and visits to local apiaries for practical demonstrations are to be included. It is here that the projected Branch Apiary should be able to be used in co-operation in this very worthwhile undertaking.

Reported by B. D. Norton

WAIKATO

Well, we can lick our wounds and now that the season is cleaned up, say that it was disappointing, as a few more tons would have been very welcome.

We have had a mild winter, with hives breeding out of season, giving some areas with hives very strong in bees, a consequent loss of stores.

Heather is flowering well and a little whitening is noticeable already. Five finger has a big budding, so we hope it decides to yield for a change.

A lot of shifting to early sources is hives. Both rewa rewa and tawari are going on, some shifting over 1,000 starting to bud so bush sources may be better this year.

Reported by Cliff Bird.

AUGUST, 1970

HONEY FOR HEALTH

By CECIL TONSLEY

127-page paperback with 8 pages of pictures on art paper. Price 60c or 65c post free. All about Honey — in History, Legend and Mythology, in Cookery, Mead making, and Medicine. A comprehensive study of Nature's greatest natural food.

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Limited number of untested queens available from mid-October until mid-November.

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Loaders, electric hoists, hand barrows and blowers.

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DANNEVIRKE

Letters to the Editor

Correspondence on any subject of interest to beekeepers is cordially invited. Publication does not necessarily imply agreement with the views expressed.

Hawkes Bay
17th July, 1970

Sir,

SHIPMENT OF LING HEATHER HONEY FROM NAPIER

A trial shipment of 6 tons of crushed ling heather comb honey packed in 45 gallon drums left Napier early May. A report received by phone from England indicates the honey was very well received and the buyer is interested in 40 tons of the same quality next season. As the price received was \$3551 (about \$590 per ton) it would appear that a valuable new export market has been opened up to New Zealand beekeepers.

IAN BERRY

★ ★ ★

Longview, Huntly, R.D.2
20 July, 1970

Sir,

The time surely has come when we beekeepers, in the interests of our industry, must stop our endless noisy conflicts and try to improve not only the organisation we have built up over the years, but also our own image to Government, the only source of those funds that are vital to us.

One can only be appalled at the implications of some of the remits offered at Conference.

With honey in competition with various spreads, notably jam offering large discounts, we have this last year been paid up to 11½ cents lb (1/2d) for bulk honey with containers supplied (two-thirds of this sum has been cash on grading).

On the local market the beekeeper may sell how he chooses, where he chooses, his only obligation being to collect the seals levy (sales tax) and fund this through the Authority for the benefit of the industry and ultimately for himself as a producer.

This year the H.M.A. could have the colossal amount of 2,000 tons of honey voluntarily supplied to its stores. This year, when the forbidding task of securing the best possible returns for the producer on this total confronts the H.M.A. and the support of the industry is of paramount importance — just where are we?

Confronted by the most intransigent opposition I have heard at any Conference, this section within and outside the industry is offering a barren waste of negatives and warmed-up whimpers that must endanger ALL our efforts.

I do appeal to producers to consider most carefully the difference between strengthening and improving our marketing structure on the one hand, and dismembering it on the other.

Those candidates for the H.M.A. elections must state very clearly their proposals with implications for our marketing, and we as producers must be quite sure just how these will benefit us now and in the future.

Congratulations to Don Barrow for his work as president.

D. CAREY

★ ★ ★

Fairview, Timaru.
July 21, 1970

Sir,

Another Conference has passed; perhaps not a good Conference, as little of constructive value was achieved, but of great significance was the attempt of factions within the industry to dominate not only decisions but to break down the orderly and sound marketing principles involved after years of testing.

To say our present system of marketing, either on the local or export scene, is outmoded would be foolish. What we have is the envy of beekeeping industries in other countries. Australia has attempted for some years to emulate our system, but the self interest of commercial factions there have so far resisted this. No other country offers the producers the protection we have in this country.

Each Conference, no matter where held, always sees a regular attendance of members of the packers' fraternity, with only the producers operating in the area near to the venue of the Conference making up the remainder of those attending. With a voting attendance of this nature, the factional interest becomes not only evident but also decisions not indicative of the wishes of the industry are made. For example, a remit seeking to terminate the Kimpton Agreement was supported by only a very vocal minority, while towards the end of Conference when the attendance of the local producers had thinned somewhat a Remit asking the right to export bulk honey by persons other than the Honey Marketing Authority was carried. This of course would contravene the Agreement, and illustrates the dangers of industry administrators acting on Conference decisions.

It is to be expected that the Honey Marketing Authority will come under criticism at Conference, but a brief look at the remits and those who support certain lines of thought is sufficient evidence to give proof that concerted efforts are being made to break down the confidence of the industry, to render the Honey Marketing Authority ineffective, and

to place the producer in a position where he has no alternative but to accept what the speculator would choose to offer him for his product.

Notice should be taken of the nature of six of the Remits sponsored by the Hawkes Bay branch at this Conference. Each Remit shows the intent to either replace or undermine the Honey Marketing Authority as a stabilising force. It is well known that from this area comes a strong opponent of the policy of the present Authority. So far, the industry has resisted the very vocal and other efforts of this faction and they must continue to do so.

A close perusal of literature in the form of petitions, newsletters, Honey Marketing Authority opponents' statements, etc. which circulate the industry from time to time is also evidence of the half truths and gross inaccuracies which must be upsetting to the uninformed, and would appear to be designed for just that purpose.

With the Honey Marketing Authority election of two producer members just around the corner it was interesting to hear at Conference of a rumour which suggested that members of the Packers' Association intended to block vote for a certain candidate. If elected to whom will this candidate give his allegiance? It is hoped that this state of affairs will not occur and that the rumour was incorrect, but surely it is time the producer looked more closely to the future. Is the producer prepared to allow his present freedom of choice as to where he may dispose of his product be taken from him by factional interests; who are in opposition to the Honey Marketing Authority?

The policy of the present Honey Marketing Authority is well known. The members of the Board are all suppliers to the Authority, have the interests of the producers at heart and make decisions which are in their interest and aimed for the good of the industry as a whole, not a vocal few. To elect candidates who do not support the Honey Marketing Authority by their policy would be to support an opposing faction and can only place the future of the industry in jeopardy.

This election is important. Great care must be taken to recognize those candidates who will support the present policy of the Honey Marketing Authority and not place support in the hands of those who would be the downfall of what has taken years of effort to obtain.

HARRY CLOAKE.

★ ★ ★

Sir,

There must be many small beekeepers able to put their bees' wax to work for them in the following manner: I have found the following recipes a great help in the household budget.

FLOOR POLISH. Chop wax up fairly small, place in a container and cover with turpentine for approximately two days. Wax should be fairly soft by then depending on how small it was chopped up. Stir well and add more turpentine if needed to work into a stiff polish.

SHOE POLISH. Obtain from a paint shop dark brown or burnt umber dry powder, and place into above mixture $\frac{1}{2}$ pint wax, 1 tea-spoon powder and work into even colour.

Black can be made in the same way by using lamp black obtainable at a local retreaders or paint shop.

Mike Bourke.

Leeston.
July 25, 1970

Sir,

A rumour was circulated at Conference to the effect that the packers' Association would give a block vote to a named candidate in the forthcoming HMA elections.

Beekeepers would be wise to ignore rumours of this nature, which have no foundation in fact. The Packers' Association has at no time decided to "Block Vote" for any candidate. Indeed at the time of Conference, the names of all candidates were not even known.

No doubt members will exercise their votes in favour of the candidate or candidates who they believe will act in the best interests of all producers, which includes packers, suppliers to packers, suppliers to the HMA, etc. The Packers' Association does not presume to tell its members how to vote, neither does it have a representative on the HMA.

JASPER BRAY.

Preventive Feeding of Fumagillin in Special Cases *

(Continued from page 29)

as escorts or for the Foti method, or before the hive is used as a queen bank.

**Application has been made to have use of the drug Fumidil B gazetted as approved for the treatment of Nosema for specified purposes.*

Fumidil B is obtainable from Messrs. Abbott Laboratories New Zealand Ltd., 227 Cambridge Terrace, Naenae, Hutt City.

REFERENCES

Palmer- Jones, T. 1967: *Nosema apis*. N.Z. Beekeeper 29 (2): 4 - 7.

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FOUNDATION IN STOCK.

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EFFECT of HEAT on HONEY

By C. G. ROPE, Honey Grader, Auckland

EVERYONE KNOWS that "overheating" darkens honey and spoils its flavour. However, this spoilage is not brought about by the heat in itself, but by the length of time that the heat is applied, and by the manner in which the heat is applied. Time-temperature relationships are important, and readers are referred to the November 1965 "Beekeeper" for a table of safe combinations.

Honey is chemically unstable and its composition varies from one sample to the next, consequently the behaviour of honey is anything but consistent. Seldom is it possible to make a hard and fast rule about honey; often one can give only the general trend. For example, if a number of honeys are intentionally overheated under identical controlled treatments it can be observed (Pfund) that no two will spoil alike. There is no similarity in the pattern of spoilage, in the extent or the rate. The only thing that is certain is that they will all spoil to some degree.

And no honey darkens steadily at an even rate, to the contrary, colour loss occurs in a series at different stages. In a typical stage, the colour may not change for quite some time, then in a flash it will darken perhaps one, two or even five points (%). This is due, no doubt, to the occurrence of chemical reactions within the honey.

The safest way to heat honey is by means of hot air.

Thermostatically controlled hotwater jacketed appliances can also be employed with a good measure of success provided the honey is kept flowing constantly and the appliance is not permitted to run empty of honey; for honey does not convect (circulate) like water, but like porridge it tends to burn where it contacts the directly heated surfaces of the vessel even though the temperature may not be excessive within the mass of the honey. Honey is a slow conductor of both heat and cold. The bees, incidentally, are aware of this and take advantage of this fact by storing it above and at the sides of their brood nest to insulate their cluster.

Steam heated melters are still to be found in some honey houses, but they cannot be recommended to those people concerned about quality honey. The high temperatures generated by steam are not compatible with honey, for if unstrained honey is heated to above 120°F, it will be tainted by pollen, propolis, wax and other residue.

YIELDS OF HONEY

QUESTION:

Is 100 pounds per colony an average, or towards the maximum yield.

ANSWER:

Hardly one or the other. One third of the amount is nearer the average yield of comb honey, and half of that for extracted, while a maximum annual average might be to 150 or more. It must not be forgotten that the yield sometimes is less than nothing, that is

no surplus is taken and the bees have to be fed to keep them alive.

No, this is not a question associated with beekeeping in New Zealand although both question and answer would seem appropriate in this day and age.

The question was asked of Dr. C. C. Miller who ran a Questions and Answers" Column for the American Bee Journal for 22 years from 1895.

BEEKEEPERS' TECHNICAL LIBRARY

The following books, being the Library of the late Eric B. F. HIGHT, of Tinwald, Mid Canterbury, were presented to your Library by Mrs. M. Hight:

- 'How to Keep Bees,' *Anna Comstock.*
- 'British Beekeepers' Guide Book,' *T. W. Cowan.*
- 'Scientific Queen Rearing,' *G. M. Dolittle.*
- 'The Lore of the Honeybee,' *Tichner Edwardes.*
- 'Australasian Bee Manual,' *Isaac Hopkins.*
- 'Practical Beekeeping,' *Isaac Hopkins.*
- 'Beekeeping for Beginners,' *I. H. Jackson.*
- 'The Hive and the Honeybee,' *L. L. Langstroth.*
- 'The Hive and the Honeybee,' *L. L. Langstroth* (revised by Dadant).
- 'The Life of the Bee,' *M. Maeterlinck.*
- 'Thousand Answers to Beekeepers' Questions,' *C. C. Miller.*
- 'Fifty Years Among the Bees,' *C. C. Miller.*
- 'Practical Queen Rearing,' *Frank C. Pellett.*
- 'Productive Beekeeping,' *Frank C. Pellett.*
- 'Money in Bees in Australasia,' *Tarlton Rayment.*
- 'A Modern Bee Farm,' *S. Simmins.*
- 'ABC and XYZ.'
- 'Bee Culture' (Bulletin No. 18), *Isaac Hopkins.*
- 'Bee Culture' (Bulletin No. 55), *Jacobsen, Westbrooke, Earp and Bowman.*
- 'A Year's Work in an Out-Apiary,' *G. M. Dolittle.*
- 'How to Succeed with Bees,' *Atkins and Jawkins.*
- 'The Beekeeper's Companion,' *S. S. Abbott.*
- 'Queen Rearing Simplified,' *Jay Smith.*
- 'History of the Humble Bee in New Zealand, Its Introduction and Results,' *Isaac Hopkins.*

Department of Agriculture Bulletin No. 46.

Full Catalogue of books available on request from the Hon. Librarian, Chris Dawson, P.O. Box 423, Timaru.

Library books are available on loan to all members of the National Beekeepers Association. Loan Fees (including postage) 20 cents for books or bundles of 20 magazines, 5 cents for pamphlets.



LOCAL ENTERPRISE DISPLAYS A FINE PRODUCT

By M. G. STUCKEY

EXECUTIVE MEETINGS

Pre-Conference executive members met for two days and evenings at the Milford Marina to finalise the year's business and to arrange Conference procedure. Present by invitation for discussion session were members of the HMA, Department of Agriculture, a scientist from the DSIR, an insurance expert and others. Special arrangements were made for the official registration of the Association's rules to enable Conference and executive decisions to be ratified.

THE NEWLY ELECTED EXECUTIVE MET IN THE R.S.A. HALL, TAKAPUNA, AT 4 P.M. ON 10 JULY, 1970 IMMEDIATELY FOLLOWING CONFERENCE.

Present were Mr. B. S. Forsyth (President), Mr. I. J. Dickinson (Vice President), Messrs. F. H. Bartrum, R. W. Blair, R. L. Jansen, E. R. Neal (General Secretary), and Mr. L. W. Goss (Editor) and Mr. D. A. Barrow (Immediate Past President) on the invitation of the President.

A welcome was extended to Messrs. Blair and Janson, newly elected members of Executive and an apology was read on behalf of Mr. D. Penrose, another newly elected Executive member, who had to leave by plane earlier.

NEXT MEETING OF EXECUTIVE: The next meeting of the Executive would be held in Wellington at 11.30 a.m. on Tuesday, 15 September, 1970 and continuing through until Thursday, 17 September, 1970.

OUTGOING EXECUTIVE MEMBERS: The Secretary was instructed to write to Mr. T. Gavin and Mr. G. Winslade expressing the thanks of the Association for their respective services over a period of years.

MEETING WITH PACKERS' ASSOCIATION and HONEY MARKETING AUTHORITY: The Secretary was instructed to write to both the Packers' Association and the Honey Marketing Authority, inviting each to send one representative to meet the Executive of the Association on Wednesday, 16 September, 1970, at 2 p.m. or such other time on the same afternoon as might be more convenient.

INSURANCE: The Secretary was instructed to contact a non-tariff Insurance Company and an Insurance Broker to see whether either could bridge the gap in insurance for members which currently obtains.

PRINTING OF NEW RULES: Quotes for printing would be obtained.

DISTINGUISHING RIBBONS: It was agreed that the Host Branch Ribbons be sent to Greymouth Branch for safekeeping until the 1971 Conference.

You have produced a fine product, and have packed it attractively. Why not show it off to best advantage? For what it is worth, here is how we arranged the display pictured.

The Bank of New Zealand, in Takapuna, Auckland, sponsored a show of exportable products, locally produced.

Our display was 8' by 4' mounted on a sheet of $\frac{3}{4}$ " H.D. particle board, and stood on supers surrounded with a cheap drape.

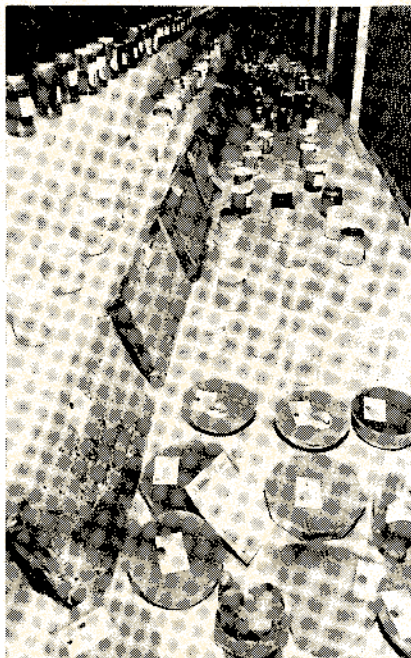
The Sections were arranged in a hollow cone on a circular platform, (which turned at 2 rpm), held in place by a shaft at the centre and rotating on four castors bolted upside down to the table. The motor to turn the platform was under the table, and to obtain the correct reduction was mounted with two counter shafts ending with a friction drive. This consisted of a rubber hose slipped on to a $\frac{5}{8}$ " shaft and rubbing against the side of the 3' circular table. Bearings used were plumber blocks but these caused too much noise and in future will be replaced with ball bearings. The motor must be silent and have end thrust bearings if mounted with the shaft vertical. A light is suspended from the ceiling and good illumination of the comb honey without heating was achieved with two 60 watt bulbs one above the other.

Sections were arranged in concentric circles on the revolving table by building them up on one another using hollow discs to decrease the size of the circle.

Each disc was attached to the one below by gluing blocks of wood the right size behind the section. A better arrangement could be designed using rods and hole. A handy device to make the revolving platform perfectly round can be constructed once the platform is attached to the table by clamping a plane to the table and turning the platform against the plane.

The final effect was fantastic, far exceeding our expectations and would have been worthwhile even if it only impressed our bank manager!

GOOD HONEY SHOW at WHANGAREI



Pictured here is part of the excellent honey, comb and wax display exhibited by the Northland branch at the Whangarei Show. Visual presentations of this nature are excellent public relations and branches or individuals should take every opportunity to bring before consumers local production. When practical, an observation hive is the real eye-catcher for both adults and children and makes a lasting impression on the memory of a day out. This is point of sale advertising at its best and costs little to achieve maximum impact. (Picture by courtesy of Arthur Tucker.)

OVERSEAS BEE JOURNALS

Australasian Beekeeper

Provides a complete cover of beekeeping topics in one of the world's largest honey producing countries. Published monthly by Pender Bros. Pty. Ltd. Box 20, P. O., Maitland, 3N, N.S.W., Australia. Subscription New Zealand \$A4.20 per annum (in advance) post paid. British Isles and British Dominions and other overseas countries £A4.80 per annum (in advance) post paid. Sample copy free on request.

American Bee Journal

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Subscription: 1 year \$4.25, 2 years \$7.75, 3 years \$10.75. Foreign postage per year 65 cents additional.

Gleanings in Bee Culture

A 64-page Monthly Magazine, generously illustrated featuring timely articles on Beekeeping practices in the United States.

Rates \$US3.50 per annum.

Sample on request.

THE A.I. ROOT CO., MEDINA, OHIO.

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1-10 \$1.45 each

10-19 \$1.40 "

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to learn all phases of beekeeping practice, and to be thoroughly taught beekeeping as a career. Top wages and excellent conditions with accommodation for a lad willing to pull his weight.

Written applications to:

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2 R.D., WHANGAREI
or phone 612 Titoki.

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Here is an opportunity for advancement in an expanding export business for an experienced man who wishes to earn top wages and a production bonus.

Accommodation available for a suitable applicant.

GAVIN'S APIARIES LTD.
TITOKI
2 R.D. WHANGAREI
Phone 612 TITOKI

MAN OR YOUTH

We have a vacancy for a man or youth to start immediately in our Queen Rearing outfit. Preference would be given to an applicant who would be prepared to go on to the honey producing branch during the off-season for queens.

Wages according to experience, paid on an hourly rate. Hours worked approximately 50 hours per week.

Apply:

HAINES APIARIES LTD.
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KAITAIA, NORTHLAND

Man with some beekeeping experience is required by one of New Zealand's most progressive beekeeping businesses operating 3,000 hives of bees in South Canterbury and Southland. Fully mechanised and offering attractive working conditions.

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No. 2 R.D.
FAIRVIEW, TIMARU

BATE'S APIARIES

MATAMATA

require a young man to assist with honey and queen production for the coming season.

Good wages and production bonus.

Accommodation available.

This is the best place to learn beekeeping.

Write:

C. BIRD — MANAGER
BATE'S APIARIES
MATAMATA

A qualified beekeeper, preferably a married man, required for Commercial Honey Production.

Apply in writing, including any references to:

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P.O. Box 30-010
TAKAPUNA NORTH, AUCKLAND

8 Frame Pender Extractor, fully reversible, in good condition. \$85.00.

Phone LEESTON 618 or write:

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FOR SALE

NUCLEUS FOR SALE NUCLEUS FOR SALE

A quantity of 3 Frame Nucleus will be available this season during the first two weeks of October.

PRICE \$5.00 each plus freight.

Boxes extra but no charge if returned in good condition.

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KAITAIA, NORTHLAND
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Honey Tank with Bates' Carton Filler. 20-frame radial Extractor and motor in good order. Hot Top Capping Melter. Ward Honey Loader. Large number empty supers, etc. Phone 869 LEPPERTON, NEW PLYMOUTH

QUEENS QUEENS QUEENS
Vigorous Italian Queens raised in natural colonies. All Queens sold for 1970. Inquiries invited for 1971.

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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 \$10.00 per bale, f.o.r. Foxton.

Orders for not less than one bale, accompanied by cash and stating rail-head to which delivery is required, should be sent direct to:

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

CAPPINGS REDUCER. ELECTRIC HOT TOP

Good condition.

R. W. ROWLEY

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HONEY PACKING BUSINESS

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

'Better Beekeeping—Better Marketing'

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401	to 500 hives	\$10.00	1401 to 1500 hives	\$30.00
501	to 600 hives	\$12.00	1501 to 1600 hives	\$32.00
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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. Noms-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

SWEPT OFF THEIR FEET

Because of the highly specialised nature of bee research work, very little equipment for its needs is available commercially through supply houses.

The Apiculture Section at Wallaceville Animal Research Centre has therefore frequently to devise apparatus for use in experiments. The vacuum bee collector featured on the front cover of this issue is just one example of this work.

Constructed from a "Car-Vac" 12 volt vacuum cleaner, the apparatus can collect bees from combs or hive entrances quickly, and without injury to the specimens.

The picture, taken by Mr. J. Bellamy of the Photographic Unit at Wallaceville, shows bees being collected into a small jar.

This ingenious and thoroughly practical piece of equipment was devised by Mr P. G. Clinch of the scientific staff at Wallaceville.

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