

### THE NATIONAL BEEKEEPERS' ASSOCIATION of N.Z. Incorporated

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## PROBLEMS

WE ALL HAVE our troubles, and if conversation at Field Days is believed implicitly, beekeepers have a greater share of problems than any other members of the human race. Despite the moans, groans and cries of lamentation from those of us in New Zealand, it behaves us well to know and consider some of the problems which beset apiarists in other countries to help us count our blessings, and find cause to wonder why our contemporaries ever bother to work bees at all.

The writer recently flew from the ice and snowstorms of European winter direct to the steaming tropical heat of Ceylon, where abundant nectar sources bear for most of the year, and "wild" hives and combs hang from the upper branches of trees. In particular, in the hill stations at elevations of 5-6,000 feet, the climate seemed ideal for large scale honey production, yet it was with extreme difficulty that European plantation managers or villagers could be found who managed bees in man-made hives.

Those hives seen were extremely small and measured in the vicinity of 9" x 6" and comprised one brood chamber and a super of the same size separated by a queen excluder. The indigenous bees appear to be of the Indian variety and hives and frames are made by the beekeeper or local handyman to accommodate this small specie of bee. Wax foundation as we know it is unobtainable, and the bees produce their own combs in the frames provided.

Not only is it essential to use a queen excluder between the two boxes-which have to be produced to appropriate size from ply wood -but a queen excluder has also to be used at the entrance to exclude the wide variety of flying insects such as beetles and hornets which would otherwise strip the hive of surplus overnight.

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Executive met on Tuesday, Wednesday and Thursday, March 11, 12 and 13, 1969 at Wellington, and the following members were present:- Mr D. (Barrow (Chairman), Messrs. G. Winslade, I. Dickinson, T. Gavin, F. Bartrum, B. Forsyth and K. E. Moody (Secretary). An apology was received from Mr L. W. Goss who was absent from New Zealand.

## NATIONAL EXECUTIVE'S BUSY THREE-DAY MEETING

**IMPORTATION OF QUEEN BEES.** Discussion took place on the consideration being given to this matter by Mr Pearson, and it was agreed that the industry was seeking a beekceper who would supply the hives etc. All that could be expected of the Department would be to assist with records and supervise work. The subject was later discussed with Mr Palmer-Jones during the visit to Wallace-ville and with Messrs. Greig and Smaellie when they attended executive's meeting. Resolved that the secretary be asked to write to Dr Buddle, Wallaceville Research Station that the industry would be seeking permission for the importation of 30 queen bees, and that the supply of hives etc. would be undertaken by a recognised and reputable beekceper. Dr Buddle to be requested to make available a Departmental Officer to supervise work, observations and tests being carried out. If possible, the Association would appreciate Mr I. W. Forster being made available. It was noted that the American queen breeding firm of Dadant is considering starting in Australia. The Secretary was to write asking them to consider extending activities to New Zealand.

**CLOSED AREA.** Nominations by the Association for representatives on the committees supervising the closed area had been forwarded to Mr Carter. No official advice had been received of the Minister's intentions on the request by the Association to establish this committee. Mr Greig subsequently advised that he had been told by Mr Carter of the Minister's approval to the amendments suggested by the National Beekeepers Association for the closed area.

**DEPARTMENTAL:** Mr A. Greig and Mr E. Smaellie joined the meeting to discuss matters of direct interest to the Department and the Association. **New Zealand Bees to Canada.** The trial shipment last year had been reasonably successful and a further despatch had been requested so that a pattern could be established in testing. The New Zealand bees were considered to be approximately one-third better than those currently obtained from the States. A report had been prepared by Dr Pekoe for publication in the next issue of the Journal.

**Export Comb Honey.** Attention had been drawn to the arrival in the U.K. of a shipment of comb honey infested with wax moth. Mr Smaellie commented upon the current system for export honey and advised that a simpler basis of grading was being established. It was proposed to establish central points for grading rather than have apiary instructors covering various points in both Islands. The present system was to establish the honey into 34 different flavour categories. Under the new scheme, colour and condition would be more important. No points would be be granted for flavour, and honey would be classified under five headings with 100 points for condition and 100 points for colour. It was considered the Authority could easily adapt to this pattern.

Honey Houses. Discussion took place upon the practice of the Apiary Instructor being appointed as Health Inspector by the Health Department for the purposes of approving honey houses. In some areas the standard of honey houses needed to be improved and the apiary instructor could do a more active inspection. In some cases the apiary instructor felt that inspection of honey houses should be carried out by the inspector appointed by the Health Department.

Members of Executive indicated clearly to Mr Greig and Mr Smaellie that it was the industry's opinion that inspection should be carried out by the apiary instructors and they were asked to ensure that they were made aware of their responsibilities.

The practice of smoking in honey houses must be discouraged and the promotion of a publicity campaign for provision of 'no smoking' signs for erection in honey houses considered.

National Development Conference: In reply to a question on benefit which may accrue to the industry from participation in this Conference Mr Greig advised that there was possibly no direct advantage unless there was a real prospect of greatly increased exports. He pointed out, however, that it would be diplomatic for the Association to make some representations even at this late hour.

Consideration was given to points which could be raised and the following noted by the Secretary for the basis of submission:

- 1. Restrictions imposed by the loan limit by State Advances Corporation of \$10,000, had the effect of encouraging establishment of uneconomic units.
- 2. The need for a more liberal allocation of import licences for importing machinery and equipment.
- 3. Consideration be given to making available sugar at cost. This would enable good clover honey currently being used as winter feed to be available for export. It was estimated that approximately 1000 tons a year were used as winter feed.
- 4. Encouragment was necessary for beekeepers to be established as queen breeders. There was a danger of a shortage of queen bees being available to New Zealand beckeepers.

General: Discussion took place upon the committee to consider the supervision of the closed area, amendments to the Apiaries Act and the imposition of a grading fee on the Honey Marketing Authority.

Appreciation: The Chairman thanked Mr Greig and Mr Smaellie for being available to discuss matters with Executive.

**NORTH ISLAND TRAINING SEMINAR:** Mr Bruce Forsyth was appointed Convenor for the 1969 Seminar to be held in Hamilton. Arrangements were briefly discussed with Mr Greig and Mr Smaellie. The date was expected to be middle to late August. It was proposed to organise the Seminar in the same manner in which the South Island Seminar had been arranged in 1963, namely with Association members being responsible for arranging venue, facilities, and registration, and the Department arranging speakers. A joint Committee would be formed.

1969 CONFERENCE. At Invercargill will be from July 16 to 18 and it was noted that the branch proposed an informal get-together on the Tuesday evening with a buffet dinner on Wednesday evening.

The Minister of Agriculture, the Hon. Mr Talboys would be asked to open Conference. Should he not be available the invitation would then be extended to the Hon. Mr Hannan. The following speakers will also be invited to participate: Mr A. Greig, Mr J. Fraser, Mr. T. Pearson, Mr. T. Palmer-Jones.

The proposal to hold a meeting of producers on the Tuesday evening prior to Conference would not be proceeded with.

CAWTHRON INSTITUTE: No report had been received from Mr Thawley since Conference 1968 and the Secretary was asked to seek details of research being carried out.

**PARASITE PASSION VINE HOPPER.** Dr Cumber to be asked whether there was any further information available upon research being carried out.

The meeting adjourned at 5.15 p.m. on Tuesday and during the evening members gave consideration to the consolidation and amendments to the Apiaries Act.

VISIT TO WALLACEVILLE RESEARCH CENTRE. On Wednesday morning Executive visited Wallaceville Research Centre and were shown by Mr. Trevor Palmer-Jones and his staff some of the work being undertaken on behalf of beekeepers. Dr Buddle, Research Director, met members

**H.M.A. ELECTION PROCEDURES.** Discussion took place on steps taken to obtain further opinion from within the industry on the proposed changes to the Regulations. Replies had been received from Messrs. W. T. Herron, G. L. Jeffery, Hawkes Bay Branch, New Zealand Honey Packers' Association Inc., and Bray & Gossett Ltd. Reports were also received upon the reaction from beekeepers at Field Days held by South Canterbury, North Otago, Waikato, and Bay of Plenty. Executive gave full consideration to the points raised and it was resolved that Executive are of the opinion that there is no cause to amend the wishes of Conference. The Secretary was instructed to request the Minister of Agriculture to put in hand the necessary amendments to the Honey Marketing Authority elections.

It was considered that the matter should be placed before the Minister as early as possible and it was ascertained that Mr Carter was currently in his electorate. Resolved that Mr Don Barrow and Mr B. Forsyth take with them the letter conveying this resolution and present it to Mr Carter at the first opportunity.

**RETURNING OFFICER.** In anticipation of the proposed alterations to the Regulations whereby the Association would be required to appoint a Returning Officer, it was resolved that Keith Edward Moody be appointed as Returning Officer for the Honey Marketing Authority elections to be held in 1969.

**GROUP INSURANCE.** Practically no interest had been shown in this scheme and it was considered that the Association should take no further action. Members attention was drawn to facilities available through the National Provident Fund. **FEDERATED FARMERS:** Mr Winslade reported that there had been nothing of importance affecting the industry in material coming forward from Federated Farmers.

TONGARIRO NATIONAL PARK: The Secretary reported on the delay in forwarding to beekeepers in the Waikato area the conditions of tender for sites in the Park Board area. Discussion took place upon the practice of the Board in calling tenders for sites, and it was resolved that Executive do everything possible to discourage the practice of tendering for sites in the National Park Board area. The Park Board would be advised that Executive recommends that sites be ballotted for and that if necessary, a site fee charged. It was suggested that applications be called by October 31 and that the ballot be held prior to the end of November.

**HORTICULTURAL PRODUCERS' COUNCIL.** The Chairman reported on his attendance at the meeting held on Tuesday morning. There had been little of direct interest to the Association but at previous meetings when the question of education was being discussed, the Association's viewpoint and problems had been brought to the attention of other members.

**SUGAR SUPPLIES.** Discussion took place upon the availability of denatured sugar for beekeepers as a source of winter feed. It was resolved the Secretary write to the Colonial Sugar Co. regarding the availability of this sugar, which was available in the United Kingdom.

**BIRTHDAY HONOURS.** A request had been received for the Association to give endorsement to the nomination of a prominent beekeeper for the Queen's Birthday Honours List. After consideration it was resolved that the proposals be endorsed by Executive.

NOTE: As we close for press, no reply has been received from the Minister on voting procedure.

HONEY MEAD. An enquiry had been referred to Executive by the Honey Marketing Authority for John Reid & Co. Ltd. regarding the Association supporting amendments to the Sale of Liquor Act to allow for the production and sale of honey mead. It was resolved that the necessary steps be taken to give support to this request and that the applicant be asked for further details.

Discussion took place upon the question of servicing DIRECT MEMBERS. "direct" members with information on Association activities. Resolved that reports of Executive Meetings be sent to Branch Secretaries and only those "direct" members with thirty hives or more.

HONEY PRICES. Discussion took place upon the practice in certain areas of undercutting honey prices by sales at the gate, e.g. .18 cents per lb. when the ruling price was .20 to .22 cents per lb. It was considered that this could only be effectively countered by personal approach to the beekeeper concerned drawing attention to the loss he was sustaining.

BEEKEEPING COURSE-LINCOLN. Comment was made upon the desirability of all students attending Lincoln to take a beekeeping course. If possible details would be obtained from one or two of the Universities in Australia and the matter further discussed with Mr Greig.

**EXPENSES-EXECUTIVE MEMBERS.** Discussion took place upon the extent to which Executive members should be reimbursed for expenses incurred when they are invited to participate in a Field Day or attend branch meetings. Resolved that members should be reimbursed for expenses which they incur in attending Field Days and branch meetings where they had been specifically invited to attend, and where their attendance has been with the prior approval of the President. Reimbursement was to be on the basis of .06 cents per mile. The Secretary was asked to write to Branch Secretaries commenting upon the costs incurred by Executive members in attending Branch functions and pointing

out the desirability of reimbursing these members where possible.

Where a branch did reimburse or make some contribution to expenses incurred by an Executive member in attending the function adjustment would be made in the reimbursement which would be forthcoming from the Association.

ADJOURNMENT. The meeting adjourned at 6.15 p.m. and resumed at 8.20 p.m. when consideration was continued of the Apiaries Amendment and Consolidation Act.

CADET SCHEME. Proposals advanced by Mr Heineman were considered and enquiries would be made to see whether this could be incorporated in a scheme currently operated by Federated Farmers.

Details of the scheme were to be referred to Mr Greig for his views and if possible discussion be held with him. It was felt that the proposals required further investigation under the following headings:

- 1. A full definition of the requirements for the programme of study.
- 2. Define the requirements of the sponsor and the wage scale.
- 3. Ascertain the availability of sponsors under the scheme.

It was suggested it may be practical to commence the scheme in August 1970. The meeting was adjourned at 10.30 p.m.

**RESUMPTION.** The meeting resumed at 9.45 a.m. Thursday.

FINANCIAL. The Secretary reported upon the budget for the remainer of the year and the financial position as at the date of the meeting. It was noted that with the proposed increase in grant from the Honey Marketing Authority of \$300 the Association should break even for the year.

SUBSCRIPTIONS. Consideration was given to reviewing the subscription scale to move up in steps of 100 hives rather than the present system of 30 hives. Resolved that the Secretary prepare a report upon the proposal to increase

subscriptions as follows:

\$1.50 up to 99 hives, thereafter \$2 per 100 hives or part thereof,

and this report be circulated to Executive members with a view to submitting a remit to Conference 1969.

HONEY MARKETING AUTHORITY. Consideration was given to the role the Honey Marketing Authority plays within the industry, and as a starting point the conclusions and recommendations set out in the report of the Honey Marketing Investigation Committee in 1960 were considered and reviewed in the light of changes which had taken place since that time. (Reference is made to the paragraph number from that report.)

99. Industry's Growth. Large hive holdings are increasing and individual beekeepers declining. Production overall was remaining static.

100. Honey Marketing Authority: Considered that the suppliers to the Authority should have a greater say in Authority matters.

101. Voting Qualifications: Changes were now being recommended to these qualifications.

102. Representation: This recommendation is endorsed.

103. Ward system of Representation: Considered that this could now be further investigated.

104. Functions of the Authority: As the Authority was now openly competing for supplies and not accepting non-marketable honey the functions of the Authority had changed since 1960. It was accepted that the Authority's function is to be a stabilizing and regulating force in the industry, selling its honey in the best interests of its suppliers. Because of this it was considered that the suppliers should have a greater say in its role.

105. Export Market. The Authority should not have the sole right to export but should still continue to issue permits, i.e. private exports under the Authority jurisdiction.

**106.** Local Market. Subject to exporting the best available to overseas markets the balance should then be available for the local market to the fullest advantage of the supplier. In years when honey was in short supply the Authority should maintain its oversaes markets before supplying to the local market.

107. Payout Policy: It was considered the Authority should maintain a policy of paying for honey with due regard to realisation.

108. Grading: The proposed changes in the Grading System had the endorsement of Executive.

**109.** Seals Levy: It was considered that this was no longer an equalisation scheme and it may have possibly outlived its usefulness. It was a source of friction within the industry and it was considered that further investigation should be carried out into the function and purpose of the Seals Levy.

110. Government Subsidy: No approach was being considered for a subsidy for the industry.

111. Source of Funds: It was felt that this was no longer a valid comment particularly in regard to Seals Levy which has been commented upon in 109 above.

112. Application of the Levy Fund. It was felt that this conclusion had never been particularly applicable so far as achieving a balance between payout for honey supplied to the Authority and returns for honey supplied by producers to packers.

113. Sales Promotion: It was considered that the advertising programmes had not been effective in the past. The Secretary was asked to prepare a report upon these conclusions for consideration by Executive members prior to submission to Mr Carter.

AGRICULTURAL CHEMICALS BOARD. Mr T. E. Pearson's term of appointment as the Association's representative on the Agricultural Chemicals Board would expire on March 31st. Mr Pearson would be invited to serve for a further term. HONEY MARKETING AUTHORITY, Mr Jack Fraser, Chairman of the Honey

HONEY MARKETING AUTHORITY. Mr Jack Fraser, Chairman of the Honey Marketing Authority, and Mr Trevor Edgerley, General Manager, joined the Executive Meeting and the following matters discussed.

Seals Levy: Mr Fraser advised that the Packers' Association had made representations to have the Seals Levy reduced.

**Role of Authority:** Mr Fraser commented that the Authority was continuing a policy of producer control and giving the producer greater control than in the past. The Authority was taking steps to avoid being purely an advisory and regulatory Board and it was now in business in a big way and could handle more than 50% of the New Zealand honey crop for this season.

**Grant:** The Chairman expressed appreciation for the increase in the grant which was being proposed. Mr Fraser commented that the increase was justified on the question of increased costs and depreciation in currency alone and the case which had been presented.

**Containers:** There had been a good response to the container supply but there had been troubles with obtaining them from suppliers due to late delivery and delays with the Railways.

Honey Prices: The Authority was maintaining the same level of prices as packers and prices being received on the local and overseas markets were very satisfactory. There had been a big growth of backdoor sales and these were causing problems with packers in certain areas.

Advertising: This had stopped for the previous year and no firm decision had yet been taken for 1969/70. A new project was required to replace the one currently running in the Trades Alphabet and assistance would be appreciated from a school teacher or someone able to prepare material.

Staffing: This had been reorganised and a new chain of command established. It was proposed to appoint an accountant who would be responsible to the General Manager for New Zealand and there would be a Factory Manager for the three factories respectively.

**REVIEW—APIARIES ACT:** Mr Greig, Mr Smaellie and Mr Gajahadar (Office Solicitor) joined Executive and a clause by clause review of the proposed consolidation of the Apiaries Act was undertaken. The points raised and agreed upon were noted and Mr Gajahadar undertook to make available a further revised draft within two weeks. The Act was being given priority for the forthcoming session of Parliament and there was a real need to see that copies were considered by Executive before finally being printed for consideration by Parliament.

**PART-TIME APIARY INSTRUCTORS.** In the course of the review of the Act discussion took place upon the role of part-time Apiary Instructors. Enquiries were to be made with the Department regarding the current terms of appointment of Apiary Instructors and, in particular, to be satisfied that part-time inspectors were not allowed to destroy hives unless in the presence of the Apiary Instructor.

**PARASITE FOR FLIES:** The Secretary had written to Dr Cumber seeking his assurance that the parasite being released in the North Auckland area would not be harmful to bees. The reply from Dr Cumber was considered and it was noted that he mentioned the fact that an approach had been made by the Association direct to the Minister. The Secretary was asked to write to Dr Cumber advising that this was not correct, and expressing concern of Executive in the growing increase in the release of control insects.

The meeting concluded at 4.20 p.m.

#### IMPORTANT NOTICE — REMITS FOR CONFERENCE

REMITS MUST BE POSTED TO THE OFFICE OF THE GENERAL SECRETARY, P.O. BOX 40-127 UPPER HUTT BY MAY 30 AT THE LATEST TO ENSURE RECEIPT BY JUNE 2. PLEASE ENSURE THAT REMITS ARE DESPATCHED AS EARLY AS POSSIBLE.

# FLAVOUR EVALUATION

Technical Bulletin No. 284, issued November 1948, entitled "Flavour Evaluation Procedure", by J. C. Henning, published by the New York State Agricultural Experiment Station, Cornell University, Geneva, New York, States:

### THE PANEL METHOD

A flavour panel scoring products should work in a room free from odors or disturbances. The scoring is done "blind" — that is, no member of the panel knows the identity of the samples scored. Likewise consideration must be given to the proper temperature for examination of a given product, the amount of sample, number of samples which can be examined without taste fatigue, and preferred time of examination. It is very important that the person making flavour tests be able to sit down, that he be at ease, and that he have no outside distractions.

No definite conclusions have been drawn relative to the most desirable temperatures for the organoleptic examination of products. There is a general feeling that the products should be examined at the temperature at which it is normally served. There are obvious exceptions to this rule, especially where the tests involve foods which are consumed at relatively extreme temperatures. Bengtsson and Helm (2) state that "the optimum temperature for the perception of taste is generally considered to be about 68°F or somewhat higher; some workers give figures as high as  $100^{\circ}$ F. When  $122^{\circ}$ F is reached, the gustatory nerves cease to function."

It should be pointed out that in these panel makeups people selected for reliable judgments should be calibrated by hundreds of examinations that are a matter of formal written record. A judge may be required to have an average deviation of not more than 1 point from the average scores of the group and a standard may be set for his ability to repeat judgments on duplicate samples.

Persons from all walks of life can be selected who can satisfactorily detect flavour differences and have good flavour memories. A good flavour memory is as important as the ability to detect flavour differences. However, the ability to pass reliable judgement on flavour differences in a product resulting from different methods of processing and times and temperatures of storage requires considerable experience with that particular product. A beginner can gain experience by working with a group of trained observers. His scores do not need to be counted until he has gained sufficient experience to have them fall in line with those of the rest of the group. In the first method a panel of at least eight trained observers should give statistically sound results. However, if only four judges are available, the same number of judgments can be obtained by scoring each sample twice.

A numerical scale is set up for evaluating the product with a position on the scale which defines the lower limit of acceptability. An increase in quality parallels an increase in numerical value. Many types of scales varying in one or more respects are used in the scoring of products. In the Geneva flavor examinations the score sheet with a scale of 1 to 10, is used. A sample rated excellent is given a score of 10; good falls in the range of 9, 8, 7; fair; 6, 5; poor, 4, 3; and very poor, 2, 1.

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The management of honey bee colonies for honey production has not changed fundamentally since the invention of the movableframe hive more than a century ago. However, now that beekeepers in many countries are facing an intensifying cost-price squeeze, new methods of increasing production or of cutting costs are being keenly sought.

# QUEENS WINTERED IN MINIATURE HIVES

#### BASED ON RUMANIAN TECHNIQUE

#### By V. A. COOK, Apiary Instructor, Dept. of Agriculture, Oamaru.

(Photographs by courtesy of "The Journal of Agriculture")

THE REGULAR PROVISION of young, quality queens is a most important part of beekeeping management and also a high cost factor. Queen bees can be reared in greater numbers, and more economically, in late summer and autumn than in the spring, when they are most needed. If late summer and autumn-reared queens could be wintered cheaply in large numbers, significant economic benefits would result for beekeepers and queen bee breeders. A plentiful supply of queens could be made available in early spring for use in two-queen colony management, to re-queen ordinary colonies; or they could be introduced into nucleus colonies made up to replace colonies lost in the winter.

Over-wintered queens also might be used to increase honey production; beekeepers with an assured supply of early spring queens need carry only about a third of their colonies through the winter and then divide them into sufficient nuclei in the spring to replace the colonies which had been destroyed. About 50 lb of extra honey would be produced from each colony not carried through the winter.

Queens have been successfully wintered in mesh cages placed in the winter clusters of normal colonies. The cages are necessary because a bee colony normally will tolerate only one queen. Worker bees feed the queens through the mesh. The colonies in which the queens are wintered must be very strong and well fed, and it is preferable to keep them in a heated beehouse. There is a limit to the number of queens which can be wintered in any one colony.

Dr N. Foti, director of apiculture at the Institute of Apiculture and Sericulture, Bucharest, Rumania, has pioneered techniques for wintering queen bees outside the winter cluster. After lengthy experimenting he devised a method of wintering queens in miniature colonies housed in unheated cabinets in the living rooms of houses with a temperature range of 57 to 75 deg. F. The attendant workers are changed periodically.

In the winter of 1967 I conducted a small-scale trial of Dr Foti's method after making modifications to suit local conditions. The performance of the wintered queens was compared with that of their sister queens, which had been wintered in normal hives during the 1967-68 season.

N.Z. BEEKEEPER

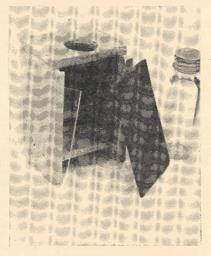


Fig. 1. One of the miniature hives made from 5/16'' pinus radiata with hardwood sliding door. Glass plate prevented escope during examination. Small hole is for inverted feeder bottle.

The miniature hives used had interior measurements of 2¾ in by 2in by 1½ in. They were made of 5/16 in Pinus radiata and had vertically sliding doors of ¼ in hardboard. A glass plate the same size as the sliding doors was used to prevent the bees leaving the hives during examinatons. A ¾ in hole in the top of each hive held a small inverted feeder bottle containing 1½ oz of liquid honey. The bees obtained the honey through perforations in the screw-top.

A small piece of bee comb was fixed to the inside back of each hive. The pieces were fumigated with glacial acetic acid to destroy any Nosema apis spores, the causative agent of Nosema disease—a disease of adult bees. Ventilation was provided by 10 1/16in holes in the upper part of the door and 15 1/16in holes in the hive floor.

It was considered advisable to house the miniature hives in an incubator. The one used was a wooded box covered with pinex. The inside dimensions were 1ft 4½in by 1ft 2in by 1ft 6½in high. The hives were placed on a movable shelf. Two 40 watt red electric light bulbs provided heat. Bees are "red blind" and, therefore, not excited in confinement by red light, as they are by white light. A thermostat on

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the upper inside wall controlled the temperature. Six %in holes in each side of the incubator provided ventilation.

The Italian queens used in the trial were reared in November, 1966. Ten queens, to be used as controls in the performance test, were introduced into 10 normal colonies in March, 1967. Ten further colonies in the same apiary were headed by two-year-old queens, which later were replaced by experimentally wintered queens. The 20 standard Langstroth hives were arranged in a circle, their entrances facing inwards to minimise the number of bees drifting to the wrong hives.

Conditions within the miniature colonies would have been conducive to the spread of Nosema disease. All the colonies and nuclei used in the trial were tested and found to be healthy.

Fifteen miniature hives, each containing a queen and about 100 attendant workers, were placed in the incubator on May 10, 1967. A strong colony selected to provide replacement attendant bees was placed in a sunny position close to the building containing the incubator.

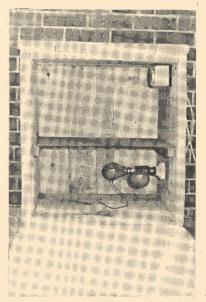


Fig. 2. Incubator housing for the miniature hive (shown in figure 1,) which was placed on the moveable shelf. Two 40 watt red bulbs provided heat, controlled by thermostat seen at upper right of casing.

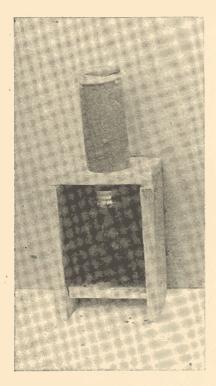


Fig. 3. Lid of the inverted feeder can be seen protruding through the hive lid. Attendant workers were replaced every fourteen days or earlier if five were seen to be dead.

The attendant bees in the miniature colonies were changed when five were found to be dead in any one colony. It was found necessary to change them every 14 days.

Replacement attendants were shaken into an upturned nucleus hive lid, where most of them clustered. After gueens in the miniature hives had been isolated, the old attendants were discarded and their replacements were scooped direct into the hives. The gueens were then re-introduced and, after the feeder bottles had been replenished, the hives were returned to the incubator. This procedure took about one minute per hive. The incubator temperature was controlled at 63 to 65deg F. Forty attendants were found to be adequate to care for each queen. The queens were confined until August 20—103 days. Eleven survived, two died, one was accidentally crushed to death, and one was lost as a result of two queens being inadvertantly placed in the same hive when attendant bees were being changed. Honey consumption averaged 13oz for each miniature colony.

The 10 two-year-old queens in the apiary selected for the performance test were removed from their colonics and replaced by 10 of the experimentally wintered queens. The 10 control queens had all survived the winter.

All 20 queens had their wings clipped for identification purposes; about three quarters of both pairs of wings were removed. The amount removed proved to be too severe, as it resulted in four queens in each group being superseded during the 1967-68 season.

The colonies were carefully equalised on October 2, 1967, with four full combs of honey, half a comb of pollen and nine combs of bees. They were examined at about three-weekly intervals to check the amounts of brood and honey, superscdure rate and any other relevant information.

The colonies which superseded their queens were immediately withdrawn

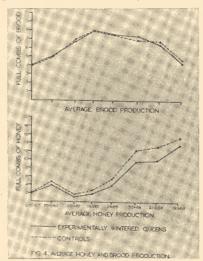


Fig. 4. Graph shows average brood and honey production of the experimentally wintered hives and of the controls, indicated by continuous and broken lines respectively.

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## POLLEN ASSISTS homo sapiens to live a fuller life

#### By Jim Kenner, our Correspondent in Sweden

Extensive clinical tests carried out for three years for the East German Ministry of Health, Arzneimittelwesen (Drug Testing Institute) have revealed that numerous men are experiencing a fuller sex life where pollen extract has been used for treatment to combat chronic infections and inflammations where antibiotics or sulfa drugs have been ineffective.

Pollen, the male sex cell in plants, consists of a hard impermeable shell often of great beauty under the microscope—which contains the secret of life in its cell nucleus—DNA and RNA. Not only does DNA determine the shape and development of all living creatures, but these same RNA and DNA molecules determine the function of all living cells.

According to Dr Erik Ask-Upmark, M.D., head of the Department of Medicine, Royal University of Uppsala, Sweden, a number of doctors are now carrying out research on the effects of pollen extract in treating chronic prostatitis and sexual problems in various countries, and how pollen extract increases normal resistance to harmful bacteria.

The most extensive clinical tests involved men who had been suffering severe chronic prostatilis ailments which earlier treatments had failed to help, and were held at the Urological Clinic of the Medizinische Akademie, Magdeburg, under the guidance of Prof. Dr. med. G. W. Heise.

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Prof. Heise, director of the urological clinic, and a well known German specialist, said patients he treated now have greater drive, and no longer suffer impotency and other sexual disturbances.

In all cases, he said, an excess of white blood cells was found, as well as disease-causing bacteria. Difficulties with urination, and pain in the region of the lower back was noted, and the long-lasting illness had caused severe depressive disturbances in four patients, and led to attempted suicide by two others.

At the conclusion of the tests, patients experienced a return to sexual normality, elimination of pain and sensitivity, and a disappearance of harmful bacteria. In two cases where venereal infections had earlier been present (gonorrhea), harmful bacteria count was no longer significant.

Throughout the clinical tests, the men were treated only with the pollen extract, and were given three pills daily. There were no side effects during the three year tests.

Prof. Heise, who has practised in the Soviet Union and Italy as well as East Germany, said he learned about the Swedish pollen extract while attending a medical conference in Prague and obtained some for testing purposes, as a result of which he has now recommended to the Ministry of Health that the preparation be imported as a means "well suited for the cure of difficult and persistent cases of prostatitis". This use of pollen re-inforces similar reports from other lands, where tests carried out over a three-month period at 12 university clinics (11 German and 1 Swedish) on 172 patients suffering chronic prostatis complaints which had failed to respond to earlier, more orthodox methods of treatment, gave encouraging results.

Similar successes have been reported by the Department of Urology, Keil University, in the Japanese Journal of Clinical Urology, in Belgium (Acta Urological Belgica) and in Sweden.

In the past the collection of pollen has been a tedious process left mainly to the bees, but after learning that 200 people in the USSR—all over 100 years old—regularly ate pollen in combs drained of honey, Gosta Carlsson, owner of a Swedish pharmaceutical firm, AB Cernelle, began his own pollen collection by mechanical means.

"I collected some pollen for scientific purposes", said Carlsson "and it was an enormous job collecting just a few ounces . . . but I felt that it was important.

"I also tried giving pollen to some of my bees in the early spring. They became larger and stronger than the others, and tripled their output for the year, so I began to try to find out a way to mechanize pollen collection."

After years of effort in this direction, Carlsson finally succeeded. With the development of his secret process in collecting pollen, Carlsson has become known as Sweden's pollen king. And it's small wonder. AB Cernelle now stores a golden hoard of pure pollen weighing 44 tons!.

### KEEPING HIVE RECORDS

Detailed notebook records of individual hives are less important to commercial beckeepers than records relevant to the apiary as a whole, such as the dates when feeding became necessary, when swarming was most prevalent, the flowering periods of nectar sources, when storeys were first needed, what mateirals will be required at next visit, and similar information.

To record the age and quality of the queen, attach to each hive a coloured, metal tag. This is well worthwhile and saves days of work in a season. Tags are cut about 2 inches by 1 inch, preferably from aluminium sheeting, and each has a nail hole at one end. The colour of the tag denotes the age of the queen, using a different colour for every six months. The spot where it is tacked on to the hive indicates whether the queen is sound; pure and has been clipped, and can also be used to convey any additional information required. For example, the ends of the tags can be easily bent upwards to identify a swarmed colony, or a vicious strain. It is then a simple matter at any time to assess the condition of an apiary by tallying up the tags. At requeening time one can see at a glance which hives are first in need of attention. If the apiary has to be shifted, the record goes along with the hive and is not lost as often happens with other systems. Those who use this system often wonder how they previously managed without it.

#### QUEENS WINTERED IN MINIATURE HIVES

(from page 12)

from the trial, as was one control colony which swarmed. The number of colonies in the trial, therefore, gradually decreased throughout the season.

No significant difference was found between either brood production or final honey production in the two groups. All the queens produced very good brood patterns. The fact that this new method of wintering the queens had no adverse effect on their performance is most encouraging. Provided healthy stock is used, I can see no reason why very large numbers of queens cannot be wintered economically by this method in small, dark rooms with a controlled temperature range of 63 to 65deg F.

#### PROBLEMS . . .

#### (continued from page 1)

Hives are mounted on top of posts at easy handling height, and to prevent the additional hazard of ants and other climbers, the floor level base is painted with grease or a reservoir of kerosene.

Fortunately, the bees are quiet and easy to handle, but the boxes and bees are so small, that constant extraction and watchfulness is required to take off surpluses as they occur, and it is a great pity that there are so many natural enemies to discourage beekeeping on a commercial scale both from the point of view of the country's economic advantage and for the pleasure of the individual. It is obvious from the large number of huge discarded combs hanging from trees that the bees have a constant struggle for existence and self preservation against predators.

Incidentally, if the visitor enters a local store in Ceylon and asks for a jar of honey, he is without hesitation given a container full of a substance resembling dark honey, but which has a flavour not unlike molasses.

Vehement protest that the product was not honey and that the title a misleading abuse of an accepted term used to describe the product of the bee eventually brought forth the information that their use of the word "honey" refers to the sap from a native tree, boiled to produce a syrup!

Allegations of misleading use and description were like whispers in the wilderness, but since the syrup is not marketed other than for domestic consumption, it is probable that no real harm is done.

However, it is a pity that more is not being made of a natural resource. Samples of honey tasted had a pleasant but strong flavour akin to Australian bush honey. Moisture content appeared to be high, although there was no sign of fermentation in the bottles seen.

To be a beekeeper in Ceylon under present conditions requires a really "good keen man", but there can be no doubt that, with careful attention and know-how to overcome the very obvious problems, a large source of supply exists. NONONONONONONUNUNUNU

## ITALIAN QUEENS 1969-70

UNTESTED 1 to 5 \$1.50 each 6 to 10 \$1.45 each 11 to 19 \$1.40 each 20 and over \$1.25 each

SELECT UNTESTED

20c<sup>1</sup> extra per queen

TESTED \$3.50 each

SELECT TESTED \$4.00 each

DELIVERY: November to April.

TERMS: Cash with order Telegrams 30 cents extra.

Please include phone number with order.

Orders AIRMAILED free on request.

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

Bred from disease-free hives under natural conditions.

Apply to---

F. D. WHITE

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

#### RETAIN FOR REFERENCE

## NEW ZEALAND HONEY MARKETING AUTHORITY Election of Members 1969

An election of two producer Members of the N.Z. Honey Marketing Authority will be held AUGUST/SEPTEMBER, 1969.

The Members retiring by rotation are:-

J. R. BARBER — Pio Pio H. CLOAKE — Timaru

Dates in connection with the election which should be noted:-

Rolls available for inspection —14 days from JULY 23 — AUG. 5. Rolls close — AUGUST 5. Nominations close — Noon, AUGUST 13. Poll closes — Noon, SEPTEMBER 10.

All correspondence in connection with the election should be addressed to:-

The Returning Officer, Honey Marketing Authority Election, C/- P.O. Box 40-127, UPPER HUTT

NOT THE N.Z. HONEY MARKETING AUTHORITY.

#### CORPORATE BODIES, PARTNERSHIPS AND SUPPLIERS TO PACKERS Please note special requirements.

In accordance with the Honey Marketing Authority Regulations 1964, copies of the roll of producers qualified to vote will be deposited at the Department of Agriculture, Head Office, Wellington, and at Auckland, and at the following Post Officers:-

Alexandra Amberley Ashburton Balclutha Blenheim Cromwell Culverden Dannevirke Dargaville Dunedin Eketahuna Geraldine Gisborne Gore Greymouth Hamilton Hastings Hokitika Huntly Invercargill Kaikohe Kaikoura Kaitaia Levin Masterton Christchurch Motueka Napier Nelson New Plymouth Oamaru Palmerston North Rotorua Roxburgh

Tauranga Te Aroha Timaru Waimate Waipukurau Wairoa Wanganui Warkworth Whakatane Whangarei Westport

N.Z. BEEKEEPER

The rolls will be open for public inspection during ordinary office hours for 14 days from JULY 23, 1969.

Any person who is remote from an office where a roll is available for inspection may write to the Returning Officer for verification that his name is on the roll. The full name of the person concerned should be supplied and the enquiry should be made during the period the roll is open for inspection.

Provision is made in the Regulations for the issue of special voting papers where a voter's name has been omitted from the roll. Any such voter should make application direct to the Returning Officer.

The number of votes which may be exercised by a voter is based upon the amount of honey supplied and/or the amount of levy paid over the preceding two years. This is provided for in the first schedule of the Regulations.

Suppliers are advised that in order to qualify for votes, consignments of honey must reach one of the Authority's depots by June 30, 1969 or be held by the Producer on behalf of the Authority and on which the Authority has paid the "pro rata" advance payment.

#### ATTENTION CORPORATE BODIES AND PARTNERSHIPS

The attention of corporate bodies is drawn to Clauses 2 & 3 of the Schedule to the Regulations which reads as follows:—

- Sect. 2: If an apiary producing honey for sale is occupied by two or more persons jointly or in common, one only of those persons shall be entitled to vote.
- Sect. 3: "Any producer being a corporate body may, by writing under its corporate seal delivered to the Returning Officer, appoint some person whose name shall be entered on the rolls as a voter on behalf of that corporate body."

A form of appointment is attached and it should be noted that a new appointment is required for each election.

#### ATTENTION SUPPLIERS TO PACKERS

Producers who wish to vote at the forthcoming election on the basis of honey supplied to packers will be required to furnish a declaration showing the amount of honey supplied. A form of declaration is attached and when completed should be mailed direct to the Returning Officer.

#### SPECIAL NOTE TO HORNBY & PLEASANT POINT BRANCH SUPPLIERS

For the year ended 30 June 1968 you are to include in the Declaration honey actually delivered into the "Branch" prior to 1st June 1968. Deliveries after that date will be advised to the Returning Officer by the Authority.

#### DECLARATION FORM

| (This Declaration Form is for the use of producers who are entitled to votes as<br>suppliers to packers. See previous reference.)                                      |
|--|
| IN THE MATTER of the Honey Markenting Authority Regulations 1964.  |
| I, (Full name)   |
| of   |
| do hereby solemnly and sincerely declare as follows:   |
| 1. That during the year ended on June 30, 1968, I supplied to  |
|  |
| of   |
| (Occupation), who is a packer of honey   |
| any honey seals.)  |
| 2. That during the year ended on June 30, 1969, I supplied to  |
| (Full name)  |
| of   |
|  |
| lbs. of honey (in respect of which I did not purchase  |
| any honey seals.)<br>AND I make this solemn declaration conscientiously believing the same to be<br>true and by virtue of the Oaths and Declarations Act, 1957.        |
| DECLARED AT  |
| By the said  |
|  |
| (Declarent to sign here)   |
| (Full name)  |
| this day of 1969, before me  |
| A Solicitor of the Supreme Court of New Zealand or a<br>Justice of the Peace.  |
| This form to be forwarded to — The RETURNING OFFICER<br>P.O. BOX 40-127,<br>UPPER HUTT.<br>Further supplies of these forms may be obtained from The Returning Officer. |

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N.Z. BEEKEEPER

#### NOMINATION OF PRODUCERS' REPRESENTATIVE ON THE N.Z. HONEY MARKETING AUTHORITY Nominations Close Noon August 13.

I (We), the undersigned voter(s), do hereby nominate

(Full name) of (Address) (Occupation) with his consent, as a candidate at the election of persons for appointment to the Honey Marketing Authority established by the Honey Marketing Authority Regulations 1964. Dated at ...... this ...... day of ..... 1969 Signature of voter ..... Full name of voter Address of voter ...... L. do hereby consent to the above nomination. Signature of Candidate ..... Within seven days of accepting nomination each candidate must deposit \$6 with the Returning Officer. APPOINTMENT OF NOMINEE BY A CORPORATE BODY OR PARTNERSHIP TO BE ENTERED ON ELECTION ROLLS (Name of Body or Partnership) hereby appoint (Full name) (Occupation) as nominee, to be entered on the rolls of the Honey Marketing Authority Election as voter on behalf of said ..... (Registered Name of Body or Partnership) Dated at ..... this ..... day of ..... 1969 IF COMPANY COMMON SEAL IF PARTNERSHIP SIGNATURE OF THE MAJORITY OF PARTNERS THIS FORM TO BE FORWARDED TO THE RETURNING OFFICER P.O. BOX 40-127, UPPER HUTT.

## Scottish Hall, Esk Street, venue for CONFERENCE 1969

#### at Invercargill . . . See you there

The Social Committee of the Southland Branch have made the following arrangements for your enjoyment and entertainment, and members are requested to co-operate with the organisers by notifying to Mrs C. M. Cunningham, 151 Great North Road, Winton, Southland whether they will be able to attend the dinner arranged for the evening of Wednesday the 16th and if it is their wish to be present at the pre-dinner cocktail function. Cost of the dinner is \$1.50 per head or a combined charge of \$2.50 for dinner and the preceding cocktails, and it will materially assist the organisers in their catering arrangements to know in advance how many guests will be in attendance. A social and dance follows.

For your convenience, a reply coupon is printed on this page, and a list is provided of hotels and motels with whom reservations can be made with the managements direct. An asterisk beside the name of the establishment signifies that it is in close proximity to the Conference Hall but does not allude to any rating, standard of comfort or amenities provided. Prices charged may be deemed to be a guide as to status, and members will be able to make their own arrangements.

TUESDAY NIGHT 15th  $\rightarrow$  8 p.m. to 11 p.m. Social gathering in the Scottish Hall, Esk Street, Invercargill.

WEDNESDAY 16th - 6.30 p.m. Elmwood Gardens, Dee Street.

Cocktail half hour. 7 p.m. Dinner. Tickets for this function are:

Dinner only \$1.50.

Dinner and Drinks \$2.50.

Social and Dance to follow.

#### **RESERVATION COUPON**

|       | I require                             | Tickets | at | \$1.50 | for | Dinner |   |        |
|-------|---------------------------------------|---------|----|--------|-----|--------|---|--------|
|       | or ,                                  | Tickets | at | \$2.50 | for | Dinner | and d                                   | drinks |
|       | for which I enclose                   |         |    |        |     |        |   |        |
|       | Name                                  |         |    |        |     |        | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |        |
| tari. | Address                               |         |    |        |     |        |   |        |
|       | · · · · · · · · · · · · · · · · · · · | ******* |    |        |     |        |   |        |
|       | To be sent to:                        |         |    |        |     |        |   |        |
|       | Mrs C. Cunningham                     |         |    |        |     |        |   |        |
|       | 151 Great North Road,                 |         |    |        |     |        |   |        |
|       | WINTON.                               |         |    |        |     |        |   |        |
|       | Not later than July 9th.              |         |    |        |     |        |   |        |
| 20    |                                       |         | N  | . Z .  | В   | ЕЕКІ   | ЕЕР                                     | ER     |

\*AVENAL, Avenal and Dee Sts. Ph. 4133. Room and breakfast \$4.80 single, \$3.55 double. \*DESCHLER'S 54 Esk St. Ph. 3023, 3024. 27 Brms. Dly \$5.50.

\*DON LODGE MOTOR HOTEL, 77 Don St. Ph. 86-125. Room and breakfast \$5 single, \$4 double. Other meals a la carte.

\*GRAND, Dee St. Ph. 88-059 (4 lines). Room and breakfast from \$5.25 single, \$4 double. \*HOTEL CECIL, Tay and Kelvin Sts. Ph. 3026. Dly. \$5.50.

\*HOTEL KELVIN, Kelvin St. Ph. 82-829. Room and breakfast \$7.50 single, \$6 double.

SOUTHLAND, Elles Rd South. Ph. 87-163. Room and breakfast single \$4.25, double \$3. BLAIR HOUSE, 202 Esk St. Phone 5694. B.B. \$3.

EL-RAY PRIVATE HOTEL, 165 Tweed St. Ph. 86-711. DBB \$3.75.

FALAMAI GUEST HOUSE, 345 Elles Rd. Ph. 5770. B.B. \$2.50.

GALA LODGE, 67 Gala St. Ph. 86-501. BB \$3.

HOMELEA HOUSE, 71 Conon St. Ph. 5324. BB \$3.

HOMEWOOD GUEST HOUSE, cnr Chapman and Ritchie Sts. Ph. 78-379. BB \$2.75 to \$3. Other meals optional.

\*RAILWAY PRIVATE HOTEL, cnr Esk and Leven Sts. Ph. 3406. BB \$2.50.

GUEST HOUSE, 387 Tweed St. Ph. 66-242. BB \$2.50.

\*MONTECILLO PRIVATE HOTEL, 234-240 Spey St. Ph. 82-502. From BB \$2.75. Twin suites, \$3.75 BB. P. bathroom, single \$5.00 BB.

\*PARKSIDE HOUSE, 165 Gala St. Ph. 86-945. BB \$2.50.

\*ROCKHAVEN GUEST HOUSE, 177 Gala St. Ph. 5604. BB \$2.50.

#### MOTEL FLATS

ASHLAR MOTEL, 81 Queens Drive. Ph. 79-093. \$6 night 2 persons, \$1.50 night each extra adult, 75c night each extra child.

\*AVENAL PLACE, 41 Avenal St. Ph. 3521. From \$5.50 night 2 persons.

**CHELMSFORD COURT**, 86 Salford St. Ph. 75-807. One night surcharge 25c person. Min, unit charge \$6 night. \$6 night 2 persons, \$1.50 night each extra adult, 75c night children under 12.

**EARNSLAW MOTEL**, 55 Earnslaw St. Ph. 86-295. \$6 night 2 persons, \$1.50 night each extra adult, children half rates. 25c surcharge 1 night.

\*FAIRVIEW MOTEL, Tay Street. Ph. 76-114. \$6 night 2 persons, \$1.50 night each extra person. Children up to 12 yrs half rates. Cooked or Continental breakfast available if required.

MITCHELL'S MOTEL, 85 Alice St. Ph. 5567. \$6.50 night 2 persons, \$2 night each extra person; children under 12 yrs \$1 night.

\*MOANA COURT MOTEL, 554 Tay St. Ph. 78-443. \$6 night 2 persons, \$1.50 night each extra adult. 75c night children under 12yrs. 1 night surcharge 25c person. Min. unit charge \$6.

\*TAYESTA MOTEL, 343 Tay St. Ph. 76-221. \$6 night '2 persons, \$1.50 night each extra adult. 75c night children under 12 yrs. 1 night's surcharge 25c person.

TOWER LODGE MOTEL, 119 Queens Drive. Ph. 76-729. \$6 night 2 persons, \$1.50 night each extra person. Full breakfast available if reqd.

YARROW MOTEL, 165 Yarrow St. Ph. 82-797. \$6 night 2 persons, extra for additional.

\*MONTECILLO MOTEL, 240 Spey St. Ph. 82-502. \$6 night 2 persons, \$1.50 night each extra person. Units may be serviced at \$5 single, \$7.50 double (including breakfast). Dinner by arrangement.

ANNA'S MOTOR LODGE, cnr Tramway Rd and Moulson St. Ph. 69-455. \$7 night 2 persons, \$3 night each extra adult. Children under 12 yrs half rates. Restaurant on premises.

# **A CHINESE INVASION**

Reported by "The Financial Times", London.

Red China's invasion of the British honey market continues. Last year's U.K. intake of 1,200 tons was more than twice that of the year before and almost 10 per cent. by weight of Britain's total imports from more than 30 countries.

Except for a rise of about £10 a ton to cover sterling devaluation, the Chinese prices remain as far below any other honey on this market as they were when supplies from this source first began to flow here five years ago. Depending on grade, this honey is still selling at £75 to £95 a ton, while that from every other origin is well above £100.

However, the Chinese undercutting is not depressing the market as might have been expected. It has taken business away from Australia, which has, as a result, lost orders from two manufacturers totalling some 1,500 tons a year, but Australia recently lifted its prices for light amber from £112 to £126 a ton.

Argentina, with a genuine shortage at last instead of the ones it has often pretended to have, has shot its rates up from  $\pounds100$  to  $\pounds160$  a ton—the highest since the market went mad in 1963. And Mexico increased its prices from  $\pounds95$  to  $\pounds117$ , though they have since eased back to  $\pounds114$ .

The explanation is that the impact of China's honey is confined solely to manufacturing honey, and the effect is being borne almost entirely by Australia, whose range of floral sources, the greatest in the world, produce a variety of types for every manufacturing and table use.

Australia's deliveries to Britain remain fairly steady at about 4,200 tons a year. But as a proportion of British imports which have climbed by almost 50 per cent. in the past five years, they have dwindled from about 45 to 36 per cent.

#### FLORAL SOURCE

To compensate for the loss of manufacturing outlets to the Chinese, the Australians are putting more emphasis on the quality end of the trade, thus helping to widen the division in this country between industrial and table markets.

Hitherto, Australia has mostly lumped all its different kinds of honey in together and sold the result by colour, but producers are now being urged to keep them separate so that they can be marketed on the more sophisticated basis of floral sources, attracting an additional quality premium of perhaps £5 or £10 a ton, adding 2d. or 3d. a pound in shops for special kinds of honey, but still far short of the prices commanded by the more exotic Continental types, such as Greek.

In this shifting of emphasis, Australia has been helped by a decline in the production of its manufacturing-type of honey in the past year—partly because of seasonal conditions and partly as a result of reforms aimed at pulling the industry out of its troubles by exploiting the country's floral richness and adopting a tighter marketing system. After some false starts, the Australian Honey Board seems to have learned how to attune themselves to the market.

Its next objective is to leave manufacturing sales to China and consolidate at the more prosperous, if not quite luxury, end of the market. Time may thus show China to have done a service to the standards of the British honey trade.

Honey prices, which have previously been higher than they are now in times of uncertainty, are likely to stay up until the end of this year, when levels will be decided by prospects for the new season's supplies from major sources— Australia, Argentina and Mexico. Whether they go higher between now and then depends partly on how world stocks, at present tight, are affected by buying from the Continent, where some reserves are running low. Latest figures suggest that British honey consumption is beginning to level out from the steep rise of the past few years, so if this slow-down coincides with heavy yields when buying begins for next year, the market could revert to lower levels.

Traditional suppliers would then have reason to be thankful that the effects of China's honey shipments are limited. Although good for manufacturing, Chinese honey does not blend well and has been turned down for table use because of its high iron content.

P. Pankiw, Head of the Grass and Legume Section, Research Station, Canada Department of Agriculture, Beaverlodge, Alta. reports his findings on

### **NEW ZEALAND QUEENS:** A PRELIMINARY EVALUATION

IN THE SPRING OF 1968, 30 selected untested queens were imported from New Zealand under a special importation permit from the Health of Animals Branch, Canada Department of Agriculture for the purpose of conducting experimental trials to determine their adaptability and performance. These queens were purchased from Mr F. White, of Kamo by the New Zealand Department of Agriculture. Mr White supplied 2 strains ‡1 and ‡2. The queens were shipped to Beaverlodge on April 21 by air arriving here on April 22. The bees arrived in excellent condition with only 1 attendant dead in 30 cages. Thus air shipment of queens from New Zealand is feasible.

Two attendant becs were removed from each cage and checked for nosema and for presence of mites. No mites were observed and only 4 attendants had an odd spore of nosema. Five attendants were taken from each cage, quick-frozen and forwarded to Ottawa for further testing. The queens were introduced on May 2 to 2-lb packages obtained from practi-

The queens were introduced on May 2 to 2-lb packages obtained from practically nosema-free colonies wintered at Abbotsford, B.C. Twenty selected untested queens from California were used as controls. The apiary site was located 5 miles from other beekeepers from May 2 to early July. All colonies were given oxytetracycline and fumagillin as a preventative on May 8. Capped brood counts, made on May 23 (egg laying from May 2-14), showed Strain 1 queens laying 677 eggs per day, Strain 2 queens 682 eggs per day, while the California queens were laying 646 eggs a day. Another capped brood count on June 11 (egg laying from May 21 to June 2) showed Strain 1 laying 1073 eggs a day, Strain 2 with 1079 eggs a day and California queens with 953 eggs a day indicating a trend of higher brood production for the New Zealand queens.

To determine honey production all the colonies were weighed June 19 and thereafter all additional supers were weighed. Colonies were examined at 10-14 day intervals for swarm cells. Bees were sampled from the New Zealand colonies and examined for mites. None were found. The New Zealand strain of bees were very gentle in comparison with the Californian strain suggesting that selection for gentleness under New Zealand conditions is applicable to our conditions. The colonies were all weighed on August 14 as the nectar flows had almost ceased. Bear damage to Strain 1 colonies was severe with 5 colonies being affected. The production of the colonies were as follows: Strain 1 — 163 lbs, Strain 2 — 179 lbs and California queens 148 lbs. The preliminary trials indicated that the New Zealand strains tested were more gentle and produced more honey than the strain from California. Thus further and possibly more extensive tests are indicated in order to assess New Zealand queens and their application to the Canadian beekeeping industry. The question of importing queens on a national scale can then be considered.

(SEE NEXT PAGE FOR LATER NEWS)

## THE "Closed Area" is now RESTRICTED ZONE

A meeting of the Apiaries Advisory Committee (Restricted Zone) comprising three beekeeper nominees and Mr A. M. W. Greig, Director, Horticulture Division, Wellington was held in Tauranga on Tuesday 1, and Wednesday 2 April to look into the extent to which the prohibited area (now to be known as the Restricted Zone) in the Bay of Plenty could be made available to the beekeeping industry for Bee Breeding or Bee Feed purposes only.

As a result of the meeting, recommendations have been made by the Committee for use of the area for specific purposes during the period 1 May to 30 November each year.

It was decided that only beekeepers registered in the Tauranga and Hamilton apiary registration districts should have access to the zone and that in each case a beekeeper must have a minimum number of 400 hives registered in the Tauranga and/or Hamilton districts. The number of hives allowed into the zone by any one beekeeper would be on a pro rata basis of one hive for each 10 registered. In the case of beekeepers who would be prepared to make available to the industry, a minimum number of 1,000 queen bees, the hive ratio be 1 in 5 registered. Each site (requiring a minimum number of 30 hives) would be covered by a special permit issued by the Apiary Instructor, Tauranga.

Beekeepers who are known to qualify on account of their registered hive holdings are being advised personally of fuller details of the scheme.

> D. A. Briscoe, Secretary D. Barrow (Tauranga), B. Forsyth (Ohaupo), A. C. Ward (Waihi).

## N.Z. QUEENS TO CANADA

In mid April it was common knowledge with queen breeders that an order for 1,400 queen bees had been received from Graham's Honey Farm, Coaldale, Calgary, Canada, and that Beaverlodge had ordered a further 60 queens for continuation of the evaluation programme. No official notification having been received from the Department of Agriculture, Wellington, that entry permission to Canada had been granted, and in the absence of any advice to Executive, a telegram was despatched asking for confirmation that the ban had been lifted. The following reply was received from Mr J. H. Watt for the Director, Horticulture Division:

"Permits have been issued by the Veterinary Director General Canada department of Agriculture, Ottawa, authorising import into Canada of queen honey bees and their attendants, from New Zealand.

A condition for entry into Canada is that the queen bees and attendants must be accompanied by an official certificate issued by the Department of Agriculture stating that acarine disease does not exist in New Zealand and that the apiaries from which the bees originate are free of acarine disease, bacillus larvae and other infectious and contagious diseases of bees."

## Mr. COST CONCIOUS APIARIST

**HAVE YOU CONSIDERED** the actual cash value of the honey it costs you to bring your hives through the winter alone. It could very well be that if you add to this your requeening costs you would be well in pocket to gas your bees at the end of the flow and buy package bees in the Spring. A 2 lb package will, in 10-12 weeks if fed and managed correctly, build up to a normal strong colony.

**FREIGHT COSTS** can be saved by getting 4 lb bees and 2 queens in one cage. You divide it into 2 colonies at installation. Freight costs can be further cut by apiarists in one area combining and trucking their bees themselves.

**A 2 lb PACKAGE** costs \$3.90. Air freight costs approx. \$1.00 per package to Dunedin.

**HERE IS A TOPIC** for discussion at your next branch meeting. If you have any queries or would like a copy of the installation instructions write to

### HAINES APIARIES LTD.

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The Package Bee Specialists.

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

Branding pays, especially in CARDEA cartons because you can get bold striking designs which make your name stand out.

With a distinctive design and a boldly displayed name, customers will be able to pick YOUR honey out AGAIN

### Frank M. Winstone (Merchants) Ltd. 71-79 Customs Street East, Auckland

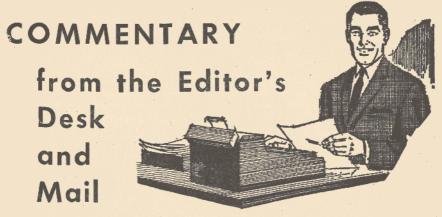
SOUTH ISLAND REPRESENTATIVE: P. G. COLLINGS 33 Charlcott Street, Christchurch Phone

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UBBOTI

ANTERRIS

33 Charlcott Street, Christchurch Phone 516-062



CODEX ALIMENTARIUS, the code governing the production and consumption of honey in many countries of the world, is expected to be ratified by the working committee now in session. Individual Governments will decide whether or not they accept the recommendations made, but limitations imposed by importing countries might well have adverse affect upon exporting countries. Time will tell.

INTEREST HAS FLARED in hive design again, particularly in the UK, and a picture appears in this issue of the Catenary hive patented by Mr W. B. Bielby of the West Riding of Yorkshire. The word "catenary" incidentally, refers to the curve of a chain hanging freely between two points—the shape of the frames in this particular hive.

OPTIMISM IS REFLECTED in the news that a new foundation manufacturing plant is starting in England, incorporating the latest in techniques for "keep fresh" packaging to ensure pliability for long storage. Provision is being made for the reclamation of wax from old combs, a process apparently carried on outside the industry at present.

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**COMPLAINT IS MADE** in the British press of the ravages of sparrows on in-coming and outgoing flights from hives, but apparently the nuisance is restricted to nesting time when fledglings are in the nest, and the house sparrow is the culprit. Hedge sparrows are named as blameless. The author reminds apiarists that on the credit side, sparrows are good friends in their destruction of aphids and caterpillars, and there is obvious reluctance in suggesting that they should be trapped and killed by placing wire cages on hive roofs.

**THE BEEHIVE INN** at Grantham, Lincolnshire, which uses a hive in a lime tree as a living pub sign, has imported a stock of Russian bees from a Texas breeder because of their docility. It might be interesting to conjecture the resting place of the first swarm and whether licensing hours will be selected.

OUR SCOTTISH FRIENDS are reasonably pleased with their heather honey crop and have issued the following recommended list of minimum prices for "mixed" honey from floral sources and for pressed and heather sections. Retailers expect a profit of between 17-25% profit on the retail selling price.

#### MAY 1969

The prices quoted are the MINIMUM, and the convener of the markets committee points out that where transport charges and local consumer demand dictate, prices should reflect an upward trend.

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THE AMERICAN BEE JOURNAL reports that U.S. officials are attempting to get together with the proper Canadian authorities to decide what action, if any, should be taken in connexion with the shipment of New Zealand queens to Beaverlodge. The Journal points out that such shipments could prove embarrasing to both Canadian and U.S. officials under the current import regulations of the two countries.

THE AUSTRALIAN HONEY BOARD have thought up two good services to promote honey in the use of H.I.S. and H.E.R.S. The first refers to Honey Information Service, and the latter to Honey Everyday Recipe Service, which offers a wide range of recipes and other uses for honey to the public through press, radio, and television. Who can forget HIS and HERS?

**THE FEDERATION OF IRISH BEEKEEPERS** suggest to members that they should charge the same prices for honey as for last season. i.e. 4s. 3d for a 1 lb jar and 4s. 9d for grade "A" Sections cleaned and wrapped. Not so inviting as Scottish prices, but still the envy of hard working kiwis.

**BEE CULTURE** reports that the United States Department of Agriculture details 2,100,000 pounds of honey utilized during 1967 in the school lunch programme at a cost to the Department of Agriculture of \$US 400,000. For the first half of 1968 300,000 lbs to a total value of \$US 1,600,000 was expended. BEE CULTURE comments that the industry is fortunate that honey is included in the Government school lunch programme, and for the opportunity it provides of the nation's youth acquiring a taste for honey. This is the kind of band waggon we would all like to ride.

**PLASTICS** were in evidence at the National Honey Show in London, and several manufacturers exhibited polyester honey tanks, polythene and fibre glass feeders etc. and an Italian firm showed a strange and wonderful hive which completely puzzled all who examined it. A booklet purported to explain the operation of the hive in Russian and in a language which appeared to be of English or American origin but containing so many words never before seen in the Oxford Dictionary, that nobody was any the wiser. BEE CRAFT reports that a definite move forward was to be seen on the stand of Cope Allman Plastics, who are producing an attractive and well made one-pound honey jar. Mention is also made of J. L. Guilfoyle's plastic queen excluder.

**REPORTED ELSEWHERE** in this issue is the result of research into the use of pollen extract for prostatitis. A protein-like substance extracted from bee venom has also been used by scientists at the US Naval Radiological Defence Laboratory who found that the antibacterial effect of one milligram of the bee substance called "melittin" was the equivalent of 93 units of penicillin for the treatment of three strains of staph infection. The next time your neighbour gets stung, remind him that bees are man's best friends.

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#### N.Z. BEEKEEPER

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LA BELGIQUE APICOLE reports that a laboratory in Nice (France) has published the results of its research into the persistence of infection from bacillus larvae in frames and equipment. The report states that in 1943 re-infection had been caused by introduction into healthy hives of old frames which had been treated for bacillus larvae 12 or 15 years before. Fragments of the same frames were kept in a laboratory and were introduced into healthy hives and contaminated them. Cultures made from fragments taken from the bottom of cells confirmed the presence of spores. After a lapse of more than 35 years, fragments of frames taken from hives infected with bacillus larvae conserved their power of infection.

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A CORRESPONDENT IN BEE CRAFT comments on the few patents taken out in recent years directly connected with the beekeeping industry and that 11 of the major inventions in use today were registered 100 or more years ago ranging from the perforated queen excluder of Abbe Collin in 1849 to the bellows smoker of Quinby in 1870. He suggests, therefore, that our greatest hopes for further improvement are in the elimination of diseases and the breeding of better bees. Another correspondent reports that he was glad to be able to bring through the customs a couple of bottles of duty-free brandy from France, for he certainly needed sustenance when he found that he had absolutely no honey from 40 hives; —his worst season ever. Never forget those worse off than yourself.

**STUDENT DEMONSTRATIONS** are popular pastimes in many parts of the world, but in Saarbrucken University some of the bearded males and mini-skirted beatniks were in for a surprise when they staged their break-in after the authorities had closed the gates. Scaling a wall to gain admission, the students landed in the middle of the gardener's apiary of ill tempered bees. It is said that the demonstrators departed with greater speed than could ever have been affected with tear gas, water hoses or police enforcement.

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THE XXII INTERNATIONAL BEEKEEPING CONGRESS is to be held in Munich, Germany, from August 3-7, 1969, and all phases of beekeeping will be covered. Simultaneous translations will be available of lectures, and printed information will be sent to the bee press for dissemination.

**MR A. A. W. KIMPTON,** Managing Director of Kimpton Bros: (Red Carnation) Ltd., London, world wide honey importers and selling agents, made a hurried and unexpected visit to New Zealand last month en route for Australia

and unexpected visit to New Zealand last month en route for Australia. Arriving on Sunday afternoon, April 27, he spent a day with John W. Shackelford & Son Ltd., Auckland, visited Hamilton on the Tuesday, the morning of Wednesday with the Honey Marketing Authority and discussion with the new manager, Mr Trevor Edgerley, and left in the afternoon for Australia. It was certainly a pity that time did not permit meeting more members of the industry and for Mr Kimpton to see some of the larger New Zealand apiaries.

Letter to the

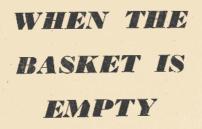
44 Baycroft Ave., Tauranga. 8th April 1969.

With regard to the article in the N.Z. "Truth" concerning Maurice Deadman's bees and Rangipo School. Reference was made that Mr Deadman had the support of the N.B.A. Members must wonder, and rightly so, what line of action the N.B.A. is taking. The position is that no official approach has been made to the N.B.A. Executive and the matter has not, therefore, been discussed.

D. A. BARROW, President, N.B.A.

MAY 1969

Sir.

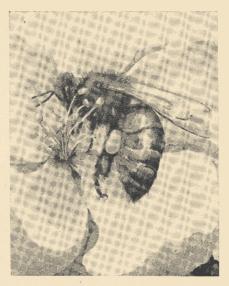


By Dr. Eva Crane (Reprinted by courtesy of "Bee World" 49 (1): 3 (1968))

The sight of bees entering a hive with their corbiculae or "pollen baskets" charged with brightly coloured loads has given pleasure to poets, naturalists and beekeepers for many centuries. Nowadays beekeepers, if not poets, know that the bees themselves remove the pollen loads from their hind legs and pack them into cells, whereas the nectar foragers pass their load over to other bees within the hive, who in turn process it for storage.

Beckeepers can now harvest pollen from a hive by fitting a pollen trap to its entrance. This "trap" has a pair of parallel grids which incoming bees must traverse in order to get inside the hive. They themselves can squeeze through, but their pollen loads get knocked off in the process, falling on to a tray which the beekeeper empties from time to time. The bees, deprived of their loads, are uninjured physically, and can fly out again to get more pollen, so beckeepers harvesting pollen have perhaps given little thought to the bees' action after passing through the pollen trap.

John L. McDonald, one of the U.S.D.A. bee research workers, has taken the trouble to find out just what happens, and his findings are published in the current issue of the Journal of Apiculture Research. The results are most interesting and somewhat unexpected: the bee that has lost her pollen loads behaves exactly as if she still carried them. After entering the hive through the trap she hesitates for a few moments, then seeks out a cell

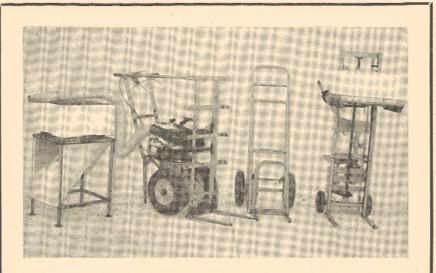


in which to deposit her non-existent loads, and goes through all the motions of packing them in the cell. If the bee is left carrying a load on one leg, she still behaves as if she wore packing loads from both hind legs into the cell. Even when a camel-hair brush was used to remove every visible grain of pollen from both corbiculae, the result was the same. It seems as though a forager that has collected pollen cannot help but complete the full sequence of activities triggered off by her earlier behaviour. The question then remains: what is the initial phase in this inescapably linked sequence of actions? Does it occur after, during or before the actual collection of pollen from the flowers, or even before the forager leaves the hive to collect the pollen?

#### A WORD OF THANKS

The Editor was fortunate enough to be able to make a hurried, but most enjoyable trip round the world recently and to see 'old friends and faces'. Grateful thanks are extended to the necessarily anonymous, but well known member of the Department of Agriculture who "put together" the last issue, thus making absence possible.

N.Z. BEEKEEPER



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

**MOTORIZED BARROW.** Still the same Barrow that has been in use for a number of years. Reduced weight by use of tubular steel. Extra attachments available. Simple friction drive reverse fitted, also choice of 2 speeds for loading bees or honey. Blower for removing bees from honey fits neatly within frame of loader making very compact unit. This means, you have a blower and have not lost any valuable space on your truck. The blower hose is removable. Just push it on and you are ready for business.

All those who are already using "WARD" motorized barrows can purchase the reverse and the blower as extra attachments.

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

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

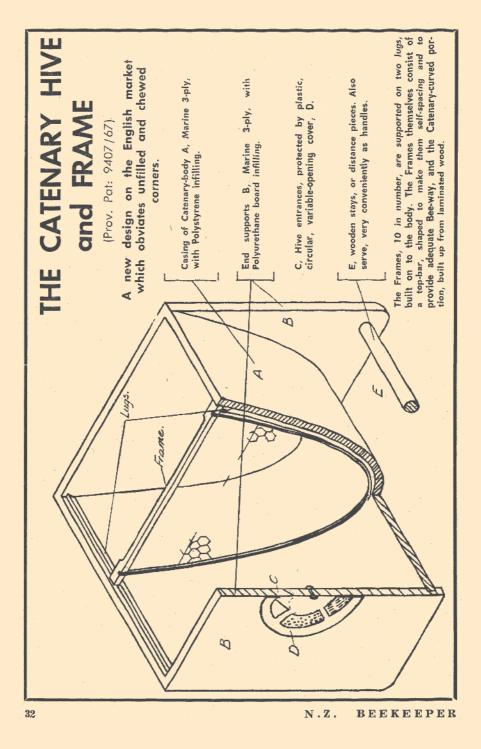
**BLOWER UNIT** separate from loader with 3 h.p. Briggs & Stratton motor mounted on tubular steel stand with bee chute and 2 wheels for moving about. Complete ready for work \$180.

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MAY 1969



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MAY 1969

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#### BAY OF PLENTY

The meeting in January was devoted to planning the joint Bay of Plenty— Waikato Field Day held at Matamata in March, a report of which appears elsewhere.

Our honey season is the best experienced for many years despite a very difficult spring. Beekeepers who were wise enough to feed their stocks with sufficient to ensure continuity of breeding have been amply rewarded, whereas those who left the bees to their own devices have not received such a good vield.

Rewarewa and Tawari have been reasonably good; so too have butter-cup and clover in pasture areas.

With such a good season, and extracting occupying more time than usual, some of the trout fishing enthusiasts of the branch are still patiently waiting for their annual jaunt to the shores of Lake Rotoiti and other local fishing grounds. Intending visitors to the Con-ference will similarly be casting their minds forward to Bluff oysters in July.

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Reported by A. G. Barrow

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#### NORTH OTAGO

We are pleased after so many years of drought conditions and poor crops that we have finally had the breakthrough. Although the flow was not heavy at any time, it continued longer than usual and we have had a fairly good crop of high grade honey.

Garry Jeffery our former branch secretary left the district last year to take up beekeeping in North Canterbury. Garry is a busy man and we haven't seen or heard much of him since he left. However, we wish him, his wife and family success and happiness in their new surroundings.

Stan Wilson has reduced the number of his hive holdings having sold most of his bees to Fred Hore. Both Fred and Stan are members of the branch.

A few new members joined the branch last year and they will have no regrets. We extend to them a warm welcome, and we are always looking for new members, so if you have only one hive we shall be pleased to see you at our meetings.

This year we intend holding a spring field day. Preliminary arrangements are to be made at our next branch meeting. Where and when will appear in a later issue of the Journal.

Reported by R. B. Mackie.

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#### SOUTH CANTERBURY

The 68-69 honey season will be remembered in South Canterbury for high winds, fine weather, and rather dry conditions. In some more sheltered areas crops well above average were gathered, while coastal area crops were below average. However, the total crop was above average and beekeepers here are very satisfied with the honey crop.

Owing to pressure of work we have not met as a group for a while but will soon be resuming our usual meetings in Timaru.

The harvesting of a good honey crop is a long and heavy task, and few people outside the industry realize what work is involved in handling a crop of 30 or 40 tons of honey, even with modern machinery to help. In spite of this, I am often told by people that beekeepers have a great time riding around in a truck!

MAY 1969

The writer has had 12 years of farming but no harvest of wheat or wool involves anything like the time it takes to harvest a good crop of honey.

However, the true beekceper enjoys his work and would not change for any other way of life.

Reported by John G. McKenzie.

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#### NORTHLAND BRANCH

Our field day for the Autumn at the home yard of Terry Gavin had a good attendance of members from Auckland to Kaitaia and the weather was beautiful. Mr Jack Byers was in attendance to give instruction of hive management, and Terry gave a demonstration on introducing a Queen with the "paper bag" method.

Northland has had one of the worst seasons ever this year with very little nectar at all. Some beekeepers will be using sugar this winter to keep bees alive. Our field day ended with an auction by Arthur Tucker of surplus bee equipment, but the beekeepers did not seem to have much money so some bargains were had. The day concluded with afternoon tea with thanks by the President to the ladies for their assistance and to Terry for the use of his honey house and bees.

The branch will be holding their Annual Meeting at 1 Norfolk St. on May 15, when Mr Bill Haines of the Far North branch will show colour slides taken on his trip to the beekepers of Canada last year.

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#### FAR NORTH

The 1968-69 season has not been one that we will look back on with pleasure. An early winter started with 13 inches of rain in nine days and cold high winds which continued through until late December, resulting in very poor build up and a manuka crop below a quarter of a five year average.

Late December rains assured us of a good clover crop. We had hoped to reach an average crop with the late rata flow but this was not to be as a fortnight of rain and cold wind dashed this flow almost completely. The overall crop was well below average.

Queen rearing and the package bee adverse weather. Mr W. I. Haines gave the branch a very interesting lecture and slide even-

ing on his trip through California, Canada, England, Malaysia and Aust.

The hives are still breeding strongly, using up valuable winter stores. We hope the present cold snap will slow them down. Hives generally are going into the winter in excellent condition and we hope for a better season next year.

Reported by M. D. Haines.

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#### CANTERBURY

Our annual field day on the 1st March at the Tai Tapu domain was a very successful function from all points of view. Weather conditions were un-favourable early in the morning but by mid-day blue skies and warm sunshine was the order of the day. A large number of members and their families and friends attended and we were pleased to welcome visitors from the West Coast, South Canterbury, North Otago and Southland.

Our President R. R. Bushby intro-duced Mr Jack Fraser, Chairman H.M.A., Mr F. Bartrum, Executive member and Mr John Smith local instructor, all of whom addressed the gathering. Mr Keith Holland and Mr Wn. Benett were also welcome guests. Baking competitions, smoker lighting and queen bee in observation hives competitions created wide-spread interest. A visit to Mr P. R. Robins extracting plant was a worth while feature. Children enjoyed soft drinks and ice cream. Our thanks to all who made the day so enjoyable.

Pasture conditions are exceedingly disastrous, the dryest for 105 years. With only 3 inches of rain since 1st of January, following a dry Summer, many farms are bereft of even dry grass. However Spring is still a good way ahead.

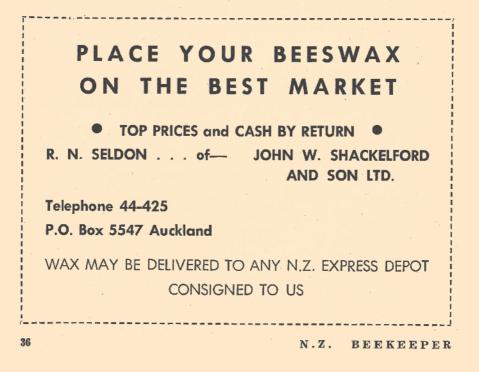
Reported by Alan R. Eagle.

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#### \* **OTAGO**

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The Annual Convention will be held at Queens Birthday weekend on Tues. 3rd June, commencing at 2 p.m. in the Pioneer Womens Hall, Moray Place, Dunedin. Reported by W. R. Sansom.



# Beekeepers' Technical Library

The following new books have been received and each book will have a Presentation Plate mounted with the name of a Foundation Life Member inscribed on it. A further seven books are expected shortly.

The Dance Language and Orientation of Bees by Karl von FRISCH.

Communication among Social Insects by Martin LINDAUER.

The story of Pollination by B. J. D. MEEUSE.

Bees, their Visual, Chemical Senses and Language by Karl von FRISCH. The Dancing Bees by Karl von FRISCH.

Donation by Vincent A COOK, Apiary Instructor, Oamaru of

"Facts about Beckeeping in New Zcaland" by V. A. COOK—16 pages—Reprinted from "BEE WORLD" and published by the Bee Research Association.

Donation by Educational Productions Limited, East Ardsley, Wakefield, Yorkshire of two film strips with commentaries—

1. The Honey Bee - 39 frames.

2. The Bumble Bee - 21 frames.

#### SEMINAR LECTURES

Copies of two papers delivered at the Timaru 1968 Seminar are available on receipt of a stamped addressed envelope:-

- 1. An address by Mr V. G. Henderson, District Commissioner of Taxes on "Taxation and the Beekeeper" 8 pages.
- An address by Mr R. E. Glenson, D.F.M., A.F.N.Z.I.M., A.R.A.N.Z., of the New Zealand Institute of Management on "Better Business Management" — 13 pages.

Copies of N.Z. Beekeeper journal wanted:-

To complete its files, your library requires the following back numbers of "The N.Z. BEEKEEPER November 1964, February 1966, May 1966.

If you do not wish to keep your back numbers, would you please look out any of these and send to your librarian.

#### SOME LIBRARY BOOKS ARE OVERDUE

If you have books on loan for over one month, they are overdue and it would be appreciated if you would return them with overdue fees immediately. Books usually can be loaned for longer perions by request.

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Following the outstanding success of the Seminar held at Ruakura, Hamilton in 1965, and in keeping with the recommendation of the previous organising committee, the National Beekcepers' Association of New Zealand, in conjunction with the Apiary Section of the Department of Agriculture, has decided to conduct a further Seminar at Ruakura Hall, Hamilton, on Wednesday 20th and Thursday 21st August, 1969.

Preliminary information is detailed below.

The Organising Committee comprises:

B. W. Forsyth, Convenor; D. A. Barrow, J. D. Lorimer of the National Beekeepers' Association; E. Smaellie, R. S. Walsh and A. W. Bennett of the Department of Agriculture.

#### PROGRAMME

#### Wednesday 20th August, 1969 Ruakura Farmers' Hall, Hamilton

| A.M.        |  |
|-------------|--|
| 9.00-9.30   | Assembly and enrolments. Mr E. Smaellie, Superintendent of Bee-<br>keeping will officiate as Chairman and will request everyone to be<br>seated at 9.30 at which time he will introduce Dr L. R. Wallace,<br>Director of Animal Research, Ruakura. |
| 9.30-9.45   | Address and Official Opening: Dr L. R. Wallace.  |
| 9.45-10.15  | Planning Beekeepers' profits: Mr V. A. Cook, Apiary Instructor, Oamaru.  |
| 10.15-10.30 | Questions.   |
| 10.30-10.45 | Morning tea break.   |
| 10.45-11.15 | Aspects of Taxation as applied to Beekeepers: Mr B. T. O'Malley,<br>District Commissioner of Taxes, Hamilton.  |
| 11.15-11.30 | Questions.   |
| 11.30-12.00 | Benefits of Company formations and hints on bookkeeping for Bee-<br>keepers: Mr A. Hilton, Public Accountant, Hamilton.  |
| P.M.        |  |
| 12.00-12.30 | Questions and General.   |
| 12.30-1.45  | Lunch.   |
| 1.45-2.15   | Overwintering of Queen Bees: Mr R. S. Walsh, Apiculture Advisory Officer, Auckland.  |
| 2.15 - 2.30 | Questions.   |
| 2.30-3-15   | My System of Beekeeping — Some Lessons Learnt from Experience,<br>Mr T. Pearson, Darfield, Canterbury.   |
| 3.15 - 3.30 | Questions.   |
| 38          | N.Z. BEEKEEPER   |

| 3.30-3.45 | Afternoon Tea.             |     |          |    |    |          |           |          |
|-----------|----------------------------|-----|----------|----|----|----------|-----------|----------|
| 3.45-4.45 | Swarming and Wallaceville. | Its | Control: | Mr | Ι. | Forster, | Technical | Officer, |
| 4.45-5.00 | Questions.                 |     |          |    |    |          |           |          |
| 5.00      | Adjournment.               |     |          |    |    |          |           |          |

#### Thursday 21st August

| 9.00-10.00  | My Impressions of North American Beekeeping Research: Walton, Apiculture Advisory Officer, Palmerston North. | Mr | G. |
|-------------|--|----|----|
| 10.00-10.15 | Questions.   |    |    |

10.15-10.30 Morning Tea.

- 10.30-11.15 Package Bees and Queen Banks: Mr W. Haines, Kaitaia.
- 11.15-11.30 Questions.
- 11.30-12.30 Forum. Chairman, Mr D. Carey.
- 12.30-2.00 Lunch.
- 2.00-2.30 Uplifting Granulated Packed Honey: Mr C. Rope, Honey Grader, Department of Agriculture, Auckland.
- 2.30-2.45 Questions.
- 2.45-3.15 Membership of N.B.A.: Mr D. Barrow, National President N.B.A.
- 3.15-3.30 Afternoon Tea.
- 3.30-4.15 Efficient Salvaging and Handling of Beeswax: Mr A. K. Ecroyd, Christchurch.
  - 4.30 Closing Address by National President, Mr D. Barrow.

Visitors to the Seminar should make their own arrangements re accommodation. The Registration Fee for the Seminar will be \$2.00, which will include morning and afternoon teas. All beekeepers will be circularised at a later date requesting them to post their registration fees promptly. On receipt of these, a lapel badge, which will serve as your admission ticket, will be forwarded to you.

Please assist the organiser by posting your application for Registration as soon as possible to: Mr D. A. Barrow, 44 Baycroft Avenue, TAURANGA. NAME(S) ADDRESS I/we will be attending the Beekeepers' Seminar and enclose herein \$ Registration Fees, representing \$2.00 per adult.

## H.M.A. ELECTIONS 1969

The Honey Marketing Authority Regulations 1964 provided that an officer of the Department of Agriculture shall be appointed as Returning Officer for the election of Producers representatives on the Authority. This responsibility of the Department carries over from the time when there was a Honey Marketing Committee as an Advisory Committee of the Marketing Department. When the Committee was established as a statutory marketing authority with full executive powers the responsibility of conducting elections was left with the Department.

powers the responsibility of conducting elections was left with the Department. The Department now considers that there is no justification for it continuing to conduct the election on behalf of the industry and is of the opinion that the industry should conduct its own elections with the procedures approved as at present by the Government by regulation.

Amendments have been made to the Honey Marketing Authority Regulations 1964 to give effect to this and have provided that the Returning Officer shall be a person appointed by the National Beekeepers' Association and that his fees and expenses shall be paid by the Authority. These fees and expenses shall be as agreed upon by the Minister of Agriculture, the Chairman of the Honey Marketing Authority and the Returning Officer.

At the meeting of the Executive held in Wellington on March 12 & 13 the Executive nominated Mr Keith Edward Moody as Returning Officer for the elections to be held in 1969.

Discussions have been held with the Departmental Officers in Auckland previously responsible for conduction the elections and the fullest co-operation was received from these gentlemen.

With this issue of the New Zealand Beekeeper you will receive the formal advice of the elections together with the necessary forms for establishing entitlement to vote as a Supplier to a Packer, for nominating persons as the Producers' representative on the Authority and for the appointment of nominees by a Corporative Body or Partnership.

VOTING BY PARTNERSHIP. Members of partnerships are advised of one very important amendment to the Regulations affecting them. In the previous Regulations it was stated that "an apiary producing honey for sale occupied by two or more persons jointly or in common only one of those persons shall be entitled to vote." It further provided that the Returning Officer shall enter on the Roll the name of such one of the said persons as he shall think fit unless the occupiers had advised him whom to enter on the Roll. Reference to previous Rolls will show where a Partnership has been entered in the trading name of the partnership alone without any nominee being shown.

The onus is now on the partnership as it is on a corporate body to establish their nominee for purposes of being entered on the Roll of Producers.

Should there be any doubt or uncertainty regarding these matters you are asked to contact the Returning Officer, P.O. Box 40-127 Upper Hutt, telephone 83-089 Upper Hutt, immediately.

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# National Beekeepers' Association Executive Visits Wallaceville Research Centre



This picture was taken when the Executive of the N.B.A. visited Wallaceville Animal Research Centre. Front row: (Left to right) Ivan Dickinson (Otago) T. Palmer Jones (scientist in charge of apicultura) research), George Winslade (Vice President), Dr. M. B. Buddle (Director), Don Barrow (President). (Second row) Keith Moody (General Secretary), Bruce Forsyth (Waikato).

(Back row) Terry Gavin (Whangarei), Freddie Bartrum (S. Canterbury), P. Clinch (Scientist), John Ross (Techniclan).

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# **Honey is Hydroscopic**

#### (By G. C. Rope, Honey Grader, Auckland)

Honey is used in the manufacture of tobacco and in cookery when it is desired to keep these products moist. Most honey contains more moisture when packed than it originally possessed when capped over by the bees. The additional moisture is absorbed from the air.

The relative humidity of the air is recorded daily beneath the weather map in some newspapers. It is interesting to follow these readings and consider how the humidity is affecting your exposed honey day by day.

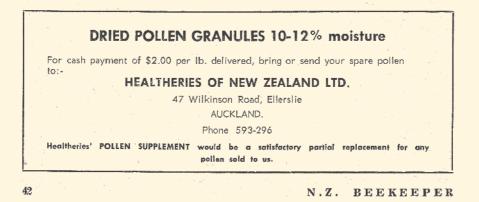
your exposed honey day by day. The relative humidity indicates the amount of moisture which the air is capable of absorbing. At 100% relative humidity, air has reached the point of supersaturation with water vapour when condensation droplets will occur. The relative humidity of any given sample of air will fluctuate with temperature changes. The instruments used for measuring relative humidity are Hygrometers or "wet and dry bulb thermometers"; various inexpensive types are available.

Honey which just passes the export requirements for specific gravity having 17.6% moisture content is in EQUILI-BRIUM with the air about it at 59% relative humidity. In this state the honey will neither absorb nor release moisture. The moment the humidity **EXCEEDS** the point of equilibrium however, the surface layer of your honey will begin to ABSORB moisture out of the air. Conversely, when humidity is LOWER than the point of equilibrium some moisture will be **RELEASED** from the surface layer of your honey into the air.

To complete the perspective, heavy bodied honey containing only 16.1% of water is in equilibrium at 52% relative humidity and honey with the lightest body containing as much as 20% of water is in equilibrium at around 65% relative humidity.

The natural diffusion of water through honey even from the surface to the subsurface layer is extremely slow due to the high density of honey. The surface layer, therefore, is often vastly different from the one beneath. The moral here for beekeepers who

The moral here for beekeepers who are troubled with low specific gravity honey is to extract their honey SOON AFTER the bees have capped it; and not to STORE combs of honey in the honey house for days on end before extracting them. Over 100 sq. ft. of comb surface is exposed to the air in one stack of supers seven high! Ten such stacks have an exposed surface of comb equal to the floor area of an average house! Each stack of honey left out of a warming room should be covered with one or two newspapers. Tanks of honey and extracting equipment in particular can soon be made airtight by covering them with polythene sheeting securely tied in place with light rope.





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#### NOTICE

#### QUEEN BREEDING

Owing to the loss of our spring sources of bee forage, our queen rearing business has become uneconomic and we cannot accept orders for the coming season.

I wish to thank those who have supported our queen rearing venture over the past 24 years and regret very much the impossibility of continuing the supply of queen bees.

Needless to say, we have amassed considerable know-how and techniques which we will be happy to pass on to anyone who perhaps would be considering producing queen bees for sale.

> ALLAN BATES MATAMATA. N.Z. BEEKEEPER

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

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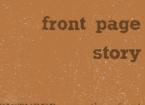
All financial members of the Association are automatically indemnified against Public Risk claims up to \$10,000 in any occurrence of injury or death to persons or livestock directly attributable to the action of the members' bees and arising from his or her negligence as the beekeeper. The cover is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

#### THE N.Z. BEEKEEPER

This Journal is issued free to all beekeepers in New Zealand having 30 or more registered hives, and to others who are members of the National Beekeepers' Association. Literary contributions and advertisements must be in the hands of the Editor, Mr L. W. Goss, P.O. Box 3561, Auckland, not later than the 25th of the month preceding publication. Nome-de-plume letters must be signed by the writer and address given, not necessarily for publication, but as proof of good faith. Letters accepted for publication do not necessarily express the views of the Editor.

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PICTURED on the front cover is the dynamic display arranged by the Wallaceville Animal Research Centre and the D.S.I.R. at the Hutt Valley Industrics Fair held last Spring.

The Fair was well supported by local manufacturing firms and the Goverinment departments with display stands, and the centre of attraction was the observation, hive in the middle of the building. Because of the situation, no access tube could be provided for the bees, and they were consequently changed every five days. Ample ventilation was provided, and water was available through a system of wicks leading to water bottles located outside the hive

Glass sides of the hive were covered with wooden shutters at night when the Fair was closed. Bee mortalily was practically nil, and the glass of the hives inspotted. The niciure was taken by Wallaceville Research Centre's photographer Mr A. W. Barkus, and the observation hive constructed by Mr A. Foster of Hastings. As will be seen by the two youngsters, keen interest was evinced as to the whereabouts of the queen, and the general explanation given to them of hive life and its lesson in communal living. Photographic blow-ups gave aspects of practical and scientific bee husbandry.



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