THE NEW ZEALAND BEEKEEPER

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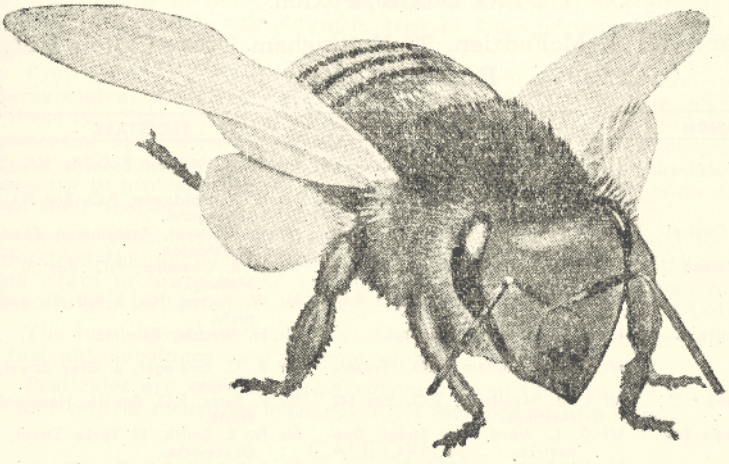

OFFICIAL ORGAN of the
NATIONAL BEEKEEPERS' ASSOCIATION
OF NEW ZEALAND
(Incorporated)

(An Organisation for the advancement of the Beekeeping Industry in New Zealand)

Better Beekeeping | Better Marketing

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MEASURES TAKEN OVERSEAS TO PROTECT BEEKEEPERS FROM EFFECTS OF PESTICIDES

(Report by T. Palmer-Jones)

The information in this report was obtained during an overseas trip made on behalf of the beekeeping industry and Honey Marketing Authority. The author was in the U.S.A. less than a fortnight, and although much valuable information was obtained, lack of time prevented an exhaustive inquiry.

Crop growing and beekeeping are both highly developed and mutually interdependent in California and to a lesser extent in Arizona, and it was in these two States that heavy mortality of bees occurred when large scale commercial application of the newly developed pesticides commenced from the air and on the ground. It was soon realised that legislation was necessary to protect humans, animals, honey bees, and such plants as vines, from their indiscriminate use.

Before considering the measures taken in detail, it should be clearly understood that legislation concerning the application of pesticides varies from State to State in the U.S.A. and particularly in the north, where agriculture is less intensive, is not so complete as in Arizona and California.

The term "pesticide" includes insecticides, weedkillers, fungicides, and in fact any substance used for controlling a pest.

Pesticides are applied more frequently from the ground than from the air and control measures must cover all methods of application.

CALIFORNIA

All pesticides must be registered with the Bureau of Chemistry of the Department of Agriculture, which administers their use and application and regulates the pest control business.

A licence must be secured before one can work in the business of agricultural pest control. The applicant must pass an examination covering the proposed scope of the work, and the licence issued shows the specific types of agricultural pest control work which the operator is authorised to conduct.

A certificate of qualification must be secured before one can use an aircraft in the business of pest control. A written examination must be passed covering the types of work for which the pilot wants to qualify.

A permit must be secured from the county agricultural commissioner (who is the local representative of the Department of Agriculture) before certain injurious pesticides such as the arsenicals, organic phosphates, E.P.N., etc., are used. A permit is not issued for the use of organic phosphates in an area in which bees are kept. Sprays, not dusts, are generally used to prevent drifting of pesticides.

Reports of damage or injury attributed to agricultural chemicals are investigated and penalties enforced.

Last year 4,000,000 acres were dusted with pesticides in California.

SUMMARY

The honey bee is safeguarded because operators applying pesticides must be properly trained and know what precautions to take when these may be dangerous to honey bees.

The county agricultural commissioners issue permits for the application of pesticides which may be injurious, and lay down conditions for their use after checking local conditions. If necessary, the local apiary instructor is consulted. A permit is not granted if it is considered bees will be endangered; but if a crop is heavily infested and must be treated to prevent destruction some bee losses may be tolerated, but the beekeeper must be warned and every precaution taken.

Instructions issued for the guidance of county agricultural commissioners are quoted:—

GROUP 1 (No losses of bees reported from use of these materials)—Aramite, Bordeaux mixture, captan, CMU, cuprous oxide, DMC, DN-111, ferbam, Genite EM-923, maneb, MCP, nabam, Neotran, Ovotran, sulfur, Sulphenone, thiram, 2,4-D, 2,4,5-T, zineb, ziram.

GROUP 2 (Do not apply around hives nor directly on bees working in blossoms. If blossoms are present, apply in early morning or preferably late evening)—Allethrin, chlorobenzilate, cryolite, DDD (TDE), DDT, Dilan, methoxychlor, nicotine, OMPA, Perthane, pyrethrins, rotenone, ryania, Systox, tartar emetic, TEPP (apply in evening), toxaphene.

GROUP 3 (Do not apply near hives nor in blossoms that bees may work later)—Aldrin, BHC, calcium arsenate, chlordane, Diazinon, dieldrin, endrin, EPN, heptachlor, isodrin, lead arsenate, lindane, malathion, Metacide, parathion, sabadilla.

Mr Robert Z. Rollins, Assistant Chief, Bureau of Chemistry, Department of Agriculture, Sacramento, gave me the above information.

I understood from him and from Dr. Eckert, Professor Apiculture, Davis University, Sacramento, that this system of protection worked well and severe honey bee losses are infrequent. If bee mortality does result from the application of pesticides the beekeeper reports the loss to the local agricultural commissioner, who sends an apiary instructor to collect samples of dead bees and investigate the case. It is usually an easy matter to find the operator responsible because of the system of licensing applications. In addition planes must be clearly marked for identification. Operators must also deposit a bond and take out insurance, so that funds are available to meet claims. Thus there is an organisation through which a beekeeper can obtain redress for loss.

This system of control was not developed primarily for the benefit of the beekeeper but to protect humans, animals, and crops from pesticides. In effect the beekeeper is not protected directly but indirectly through the control the agricultural commissioner has over the granting of permits.

A very large organisation is necessary for carrying out this system of control, and it is not suggested that it is practicable in New Zealand. As an example the Crop Improvement Association in California maintains a research organisation in Davis University, Sacramento, where experiments are carried out with various types of plane, and dusting and spraying equipment, so that advice can be given to applicators. The organisation, which I visited, has its own aerodrome, workshops, aeroplanes, aviators, and research staff. It works in close touch with Dr. Eckert, Professor of Apiculture.

ARIZONA

I visited the University of Arizona, Tuscon, Arizona, and discussed the measures taken there to control the application of pesticides.

In Arizona the application of pesticides is controlled by a board on which are representatives of the growers, applicators, University and beekeepers. The board licenses the applicators of pesticides and must be kept informed of projected dustings. These are not permitted if bees may suffer. The planes of applicators are marked so that they can be identified, and insurance must be carried, so that if bee losses occur money is available for compensation. If bee mortality is caused the beekeeper affected notifies the board, and usually the matter is settled without difficulty. If the applicator is not co-operative his licence may be withdrawn.

Applicators are given advice on the use of pesticides which do not cause bee mortality and are instructed how to apply pesticides most efficiently.

The control measures, it will be seen, follow those in force in California.

FRANCE

In France the beekeeper is protected by very full legislation brought into effect in 1955. I quote from the French decree:

"Insecticidal treatment carried out by means of toxic products dangerous to bees shall be prohibited whatever the equipment used in spreading:

(1) On fruit trees during the period of full flowering;

(2) On forest trees or trees planted in rows during the period of nectar exudation;

(3) On plants visited by bees during the period of full flowering.

Where flowering honey-bearing plants grow under trees or in the middle of crops intended to be treated by means of these products, they shall be cut or pulled up before treatment."

An exception is made in the case of certain oleaginous crucifiers (colza), which can be sprayed during the period of flowering provided beekeepers are notified so that they can remove their hives from the danger area. Such spraying must be carried out at this time to control a weevil which, if untreated, would destroy the crop.

GERMANY

In Western Germany a decree of 1950, which I now quote, protects bees from pesticides:

"It is forbidden to apply to fruit trees or fruit bushes in blossom, or to other horticultural or agricultural crops in flower which are visited by bees, any pest control preparations injurious to bees either as a stomach poison or as a contact poison.

Or to carry out a treatment in such a way that nearby stands of plants in flower of the types mentioned above are hit by sprays or dusts injurious to bees.

Before pest control preparations injurious to bees are applied weeds in flower in the orchards or field to be treated must be removed."

An exception to the above regulations is made when it is necessary for immediate treatment to be applied to crops in flower or to flowering weeds in a field crop in order to avoid heavy losses from insect pests or weed infestations. In such cases the owners of bees within a radius of three kilometres must be warned.

GREAT BRITAIN

Although losses of bees from the use of pesticides occur in Britain, casualties are less than those experienced in other countries. Also there are very few commercial beekeepers, while the many amateur ones would not often notice losses of field bees or be inclined to press for protective legislation if they did. The attitude may be summed up in a report issued by a Government committee set up in 1955 to investigate the risks involved in using toxic chemicals in agriculture. They reported: "We consider that improved co-operation between beekeepers, growers, farmers, and spraying contractors should obviate the need for legislation to protect bees."

SUMMARY

In all overseas countries where aerial and ground application of pesticides has been developed it has become necessary to protect the interests of the beekeeper by legislation. Thus in Germany and France the beekeeper is protected and the onus is on the applicator to avoid causing bee mortality. In California and Arizona also the beekeeper is protected by a very comprehensive system of legislation. In England application of pesticides has not been developed very fully and protective legislation has not yet become necessary.

In California, where every precaution is taken to prevent bee losses through aerial application of pesticides, and a vast body of past experience is available, such losses although rare still occur sometimes. But when they do the beekeeper can usually obtain compensation. In New Zealand, where aerial application of pesticides has only just commenced, bee losses such as the recent heavy ones in Canterbury may be expected, particularly while experience is being gained.

I AM CONVINCED THAT THE SITUATION CAN BE ADEQUATELY MET HERE ONLY BY THE PASSING OF LEGISLATION DESIGNED TO PROTECT THE BEEKEEPER AND GIVE HIM THE RIGHT TO LEGAL REDRESS IF LOSSES OF BEES OCCUR.

The type of legislation suitable for New Zealand conditions should be decided by a committee representing the various interests concerned. Some provision should be made, as in other countries, to allow for treatment of crops attractive to bees if these must be treated to avoid complete destruction. In such cases every precaution should be taken and a form of compensation worked out to cover unavoidable losses.

STATEMENT TO MINISTER

1st March, 1956.

Hon. K. J. Holyoake, M.P., Minister of Agriculture,
Parliament Buildings, Wellington.

Dear Sir,

TOXIC PESTICIDES

We submit hereunder the considered views of our Association as representing the Beekeeping Industry in New Zealand, in the matter of the increasing use of Toxic Pesticides in this country:—

Since the serious case of poisoning in Canterbury last September resulting in heavy losses of bees, the potential danger created by the introduction and use of new pesticides in agriculture has given the Beekeeping Industry the greatest concern. There can be little doubt that,

without the prompt action of the Department in restricting further spraying operations at that time, coupled with an intensive educational programme, still more serious losses would have resulted.

At the meeting of interested parties held in Christchurch in November last, three possible solutions to the problem were suggested. Our Association firmly supports the second proposal suggested by your Director-General of Agriculture in his letter accompanying a report of the meeting submitted to the parties which attended, namely, a programme of advice and instruction on the proper use of toxic pesticides SUPPORTED BY legislation ensuring effective operation of the necessary restrictions.

We are insistent that in such legislation the following points are essential:

1. The labelling of all toxic pesticides to show their compositions and to emphasise the dangers of incorrect application.

2. The licensing of all contract applicators of toxic pesticides whether treatment is undertaken by ground-level or aerial methods.

3. The prohibition of application of toxic pesticides to all (or any specified) crops or pastures when in flowering stage.

4. The prohibition of the sale of pesticides which are not approved for general use.

It is further considered that such provisions should be embodied in one piece of legislation to give clarity and forcefulness. It is suggested that it may be included in the proposed Plant Remedies Bill which we understand is shortly to come before the House for consideration.

While it is noteworthy that the great body of the farming community support the measures which were taken following the incident in Canterbury, and are keenly conscious of the necessity to protect the honey bee as an essential pollinating insect, experience in Hawkes Bay has clearly demonstrated that only by legislation can complete and satisfactory control be achieved. This view is also supported by experience in the main agricultural countries overseas, where strict legislative control has been found necessary to protect the honey bee population.

With the increasing importance of honey bees in seed and fruit production, the alternative to effective control could well be an agricultural calamity. In a country which depends almost solely upon agriculture for its economic wealth, this point needs no elaboration.

Recognition of the importance of the problem arising out of the use of these new toxic materials is adequately displayed in the attitude of farmers over recent months. Even before the meeting of interested parties has been called by the Department, farmers in Canterbury and Hawkes Bay areas had made representation to their Dominion Council seeking protection for beneficial insects from the dire effects of the new applications. *It will now be noted that the Dominion Council of Federated Farmers are requesting a line of action similar to the one we have outlined above.*

This fact, supported by the findings of the Department's officer who studied this very problem at first hand on the Continent and in the U.S.A. is truly indicative of the necessity for strict legislative control. With this weight of authoritative opinion, we feel sure, Sir, that you will fully appreciate the seriousness of this question of adequate and effective control.

While there is reason to believe that there are sections of thought within your Department which feel that legislation will impose some difficulties of administration, we feel that these difficulties will not be nearly as apparent as the difficulties which could be expected under a

purely voluntary system of co-operation. The very existence of enforcing legislation has, in the past, proved the ease of control, such as in Hawkes Bay, where, before, complete compliance with the Department's requests was never achieved.

It is therefore obvious that a realistic approach to the problem is required in order to achieve the desired degree of *control* for necessary protection. Educational propaganda, while a helpful palliative, can never be regarded as a cure for the malady. At the best it can only be regarded as a useful adjunct to coercive powers and remedies.

At this juncture it may be well to point out that Beekeepers' interests at present lie in *protection by prevention* rather than cure by compensation. Indeed it appears doubtful whether Beekeepers could, under existing laws, successfully maintain a claim for compensation where losses are incurred through the application of toxic pesticides. At the same time it is realised that losses must inevitably occur even under the most severe restrictions—such as the nature and extent of the hazard. With the increasing use of these toxic materials, this point may be sympathetically borne in mind when the Beekeepers' problems are considered.

May we finally stress one point. With the increasing awareness of the value of newly-developed pesticides, this problem will grow in size and importance. The immensity of the danger merits a strong course of action which will provide for not only the present problems, but also those which must become increasingly apparent over the next few years with the development of antibiotics and atomic by-products.

The emergency restrictions imposed by the Department late last year cannot be regarded as a permanent solution. Aircraft applicators have found that restrictions enforced by the Civil Aviation Regulations, 1953, do not prevent the aerial application of highly toxic pesticides such as "Lindane," and some seed-growers have already intimated their preparedness to use these materials to protect their crops, despite the knowledge of resultant danger to honey bee stocks.

It will therefore be seen that the formulation and implementation of controls is of the utmost urgency.

It is not the desire of Beekeepers to prevent farmers from obtaining the benefits of the new methods of pest control—only to ensure that application of the toxic materials is carried out at a time which will achieve beneficial results for the farmer without endangering the honey bee.

We trust that you will give your earnest consideration to these most important matters and will take steps at the earliest possible moment to implement the proposals which we have detailed, confident in the knowledge that they are sound in theory, just and equitable in practice, not only for the Beekeeping Industry but also for the farming interests affected.

For and on behalf of the Executive.

E. D. WILLIAMS, Chairman.

LETTER FROM GENERAL SECRETARY

26th April, 1956.

Hon. K. J. Holyoake, M.P., Minister of Agriculture,
Parliament Buildings, Wellington.

Dear Mr Holyoake,

re TOXIC SPRAYS

I wish to thank you for your letter of 21st ultimo addressed to Mr E. D. Williams, in which you advised that you were giving favourable consideration to the Association's request for protective legislation in the above regard.

I am pleased to note that you propose to refer the draft legislation to my Executive for consideration before new measures are placed before the House.

The question of the delay which may be expected before legislation is finally passed is causing my Executive some concern, however, especially in view of a growing resentment among farmers in the South Island over the present "Permit" system being enforced by your Department as a temporary measure to control spraying with toxic materials.

There can be little doubt that the good relations which have existed between Beekeepers and Farmers and which are essential in the interests of both industries, may be seriously damaged if the present system is not replaced with something of a more permanent and satisfactory nature at an early date.

In view of this state of affairs I hope that you will accord the matter urgency and I look forward to your advices at an early date.

Thanking you,

Yours faithfully,

R. A. FRASER, General Secretary.

NOTICE BOARD

ANNUAL CONFERENCE

The Annual Dominion Conference will be held this year in the U.F.S. Hall, Tay Street, Invercargill, on July 24, 25 and 26.

CONFERENCE BOOKINGS

Those who have not yet booked accommodation will be well advised to make early arrangements — the Springboks play Southland on the Saturday following conference, and beds will be at a premium towards the end of the week.

Travel Services

Delegates will doubtless use the means best suited to their needs— train, railcar, or plane (the Invercargill airport is now served by DC.3s).

In addition to the usual flights outward on the 26th July at:

1.15 p.m. for Dunedin - Christchurch-Wellington - Auckland

3.30 p.m. for Dunedin - Christchurch-Wellington

two special outward flights are available:

At 2.30 p.m. for Wellington

At 2.45 p.m. for Christchurch

These are the planes which are returning from Invercargill from the flight bringing the Springboks to Southland.

Delegates using railcar or plane services are advised to make early bookings, both ways.

ANNIVERSARY DINNER

The Southland and Gore Branches extend a cordial invitation to all delegates and their wives to attend the Combined Anniversary Dinner to be held in Elmwood Garden on the evening of Tuesday, July 24th.

This function marks an important milestone in the history of the industry—don't miss it.

Subscriptions (£1 per head) must reach the Secretary of the Southland Branch not later than July 10th.

Dress: Informal.

EXECUTIVE CHANGE

Following the resignation of Mr E. J. Kirk from the General Executive, the vacancy has been filled by the appointment of Mr W. T. Haines, of Kaitaia.

DUNEDIN CONVENTION

The Annual Convention of Otago and Southland Beekeepers will be held in the Pioneer Women's Memorial Hall, Moray Place, Dunedin, on Tuesday, June 5th. 1.30 p.m.: Business meeting, at which the speakers will be Messrs J. W. Fraser (Dominion Executive) and W. T. Herron (Honey Marketing Authority). 7.30 p.m.: Social Evening, to include an address by Mr I. W. Forster and a beekeeping film presented by Mr B. T. Cloake.

Visitors from the north and all interested in beekeeping are cordially invited to attend.

CONFERENCE PROCEDURE

Apparently there is a belief in some quarters that the Annual Conference is a meeting of delegates only and that Association members who are not official Branch Delegates have no place there. This is not correct. Any financial Association member may attend and speak at the Conference. When a Delegates' vote is taken, however, the voting is confined to official Delegates and to members who have arranged (through their Branch Secretaries) to exercise their own votes under Rule 34.

FEDERATED FARMERS SEEK PROTECTION FOR BEES

After the severe case of lindane poisoning in Canterbury last September, Federated Farmers were active in seeking suitable protection for bees and other beneficial insects, and remits were sent forward urgently from provincial centres with this end in view. Action was withheld, however, till after the combined meeting in Christchurch in November. Subsequently the Dominion Agricultural Section, after considering the report of this meeting, decided to support the second of three proposals put forward.

The scheme involved legal protection against indiscriminate spraying, accompanied by an educational programme, and is the same as that supported by the National Beekeepers' Association.

HONEY PRICES

A considerable time has elapsed since the Executive took up the matter of prices permissible on bulk honey, up to 20 lbs. sold by a producer to a consumer.

It will be recalled that this point was the subject of a Conference resolution last year, when it was felt that the Price Tribunal should adjust the anomaly which arose where consumers supplied their own containers, and received a reduction in price of almost 4/- per 5 lb. tin of 6/8 per 10 lb. tin over what would normally be chargeable where the producer supplied honey already packed in these containers.

Advice has at last been received from the Price Tribunal that the Association's application is now receiving favourable consideration. On indications given in the last few days there may in fact be cause for a certain quiet and reserved optimism that beekeepers will receive a greater freedom in disposing of their crops in future without distinction in the prices allowable through differing avenues of sale. The Tribunal's investigation of the application is proceeding and a definite reply is expected shortly.

A FINE RECORD

At the recent Executive meeting references were made to the services given to the industry by Mr E. J. Kirk during the period of his membership in the Association. Mr Kirk was first elected to the Executive in 1942 and has held office almost continuously since that time. An able and conscientious administrator, he approached the problems of the day with an open mind and in a tolerant spirit. His resignation means a distinct loss to the Association.

Mr Kirk was engaged in commercial beekeeping on a large scale in Taranaki. He also had some farming interests, and for personal and family reasons he is now extending his farming operations and giving up his beekeeping work. We wish him and his family every success in the years to come.

DR. QAIYUM DEPARTS

The visit of Dr. A. Qaiyum, who has been studying beekeeping in New Zealand under the Colombo Plan, concluded on the 23rd April, when he left by air on his return to Pakistan. During his seven months stay he studied recent developments with members of the Apiary Staff in the Department of Agriculture and spent some time with producers in various parts of the country. Dr. Qaiyum is engaged as Government Bee Specialist in the development of the beekeeping industry in Pakistan.

OBITUARY

Mr A. Barrett

With the passing away of Mr Alfred Barrett on 29th January last, a link has been severed with a generation of beekeepers that will never be known again. Mr Barrett was born at Wainui, Banks Peninsula, in 1878, and grew up in the days of the box hive. He took naturally to the handling of bees, and when a friend gave him a box hive he was delighted with the opportunity of exploring the mysteries of the hive. Without the aid of any books he discovered for himself the routine of swarming and the hatching and mating of queens. He had a skill of his own in transferring bees from their wild quarters to frames, and whether he was doing this or grafting queen cells or hunting for queens he brought a flair for observation to his work that made it a pleasure. What is more, he was always willing to share his knowledge with anyone interested.

The older generation of beekeepers will remember him at Conferences, though not for what he said to Conference. He had a natural shyness which prevented him from speaking in public. He joined Mr W. B. Bray in partnership in 1912 and together they went through the vicissitudes of beekeeping and marketing when beekeepers were finding their feet. They experimented and profited by their mistakes, and Mr Barrett was never backward in bringing his experience to bear on new problems. The mental powers of independent thought that carried him through beekeeping enabled him to give the same keen analysis to the social and economic problems of the day.

In 1945 he disposed of his interest in the firm of Barrett and Bray to Jasper Bray, by whom it is now carried on in conjunction with Mr A. R. Gosset. Mr Barrett was the youngest of a family of pioneers, and the sole survivor. He was never married.

SCOTT BASE

Plans for Scott base, New Zealand's Antarctic headquarters to be erected on the shore of McMurdo Sound at the foot of the Ferrar Glacier, call for the provision of 10 buildings.

The final food lists are now being checked by nutrition experts to ensure the high calorific value essential to Antarctic health—more than double the 2300 calories a day regarded as desirable to a New Zealand diet. Diet charts will be made public as soon as the committee is assured they are satisfactory.

Mr J. Holmes Miller, the master surveyor who went with the British Antarctic advance party into the Weddell Sea this summer, will be second-in-command to Sir Edmund Hillary when the New Zealand party of the trans-Antarctic expedition goes to the Ross Sea in December next.

EXECUTIVE MEETING

A meeting of the General Executive was held in Wellington on February 29th and March 1st. Those present were Messrs E. D. Williams (President), J. W. Fraser, J. D. Lorimer, R. V. Glasson, H. Cloake and R. A. Fraser (Secretary). The Editor (Mr J. McFadzien) was also in attendance.

Toxic Pesticides

Urgent consideration was given to the problem of poisonous spray materials, and the Executive interviewed both the Assistant Director-General of Agriculture (Mr R. B. Tennent) and the Minister of Agriculture (the Hon. K. J. Holyoake) with the object of obtaining legal protection for honey bees. In the course of a full discussion with the Assistant Director-General and officers of the Department the proposed method of control, arising from the combined meeting of interested parties held in Christchurch in November, and details of suitable legislation were considered. Mr Tennent emphasised the value of bees as pollinating agents and hoped that an effective means of protection could be introduced.

A formal statement of the views of the Association and the measures required to prevent damage from pesticides was later presented to the Minister of Agriculture. The Minister received the submissions of the Executive sympathetically and indicated that the proposed scheme was also supported by Federated Farmers. In view of the fact that similar legislation had been found necessary in overseas countries the proposals seemed reasonable and he promised to give them close consideration with a view to having legislation introduced as soon as possible.

Price Order

The President introduced the subject of Price Control and indicated that the Honey Marketing Authority intended to apply for the removal of Price Control from honey. In taking this course it invited the support of the Executive.

The matter was discussed at length but there was some divergence of opinion among members. The view was freely expressed that the Price Order provided a sound and authoritative basis for the ruling price level and was a valuable stabilising factor at times when large volumes of honey came on to the market. This opinion was also reflected in the resolution from the last Dominion Conference asking for the retention of a Price Order on honey. Finally it was resolved that the Executive oppose the Marketing Authority's application for the removal of Price Control, but that the matter be brought forward again for discussion at next Conference.

H.M.A. Regulations

The draft of a proposed amendment to the regulations was before the Executive and was approved by the meeting. This provided for the franchise to be based on the average production of two years instead of the return for one year as at present. The objective is to avoid unduly penalising any producer as the result of a crop failure in any one year.

It was also suggested that the Returning Officer should be empowered to take votes by declaration, to cover any discrepancies in the roll, and this proposal was approved in principle. It was pointed out that under this system a producer would not be disfranchised if his name should be inadvertently omitted from the roll.

Membership

The decline in Association membership over the past few years caused some concern, although the decrease was confined mostly to members in the domestic class. The Secretary gave the results of a questionnaire he had circulated with the idea of finding any weaknesses in the organisation, and he hoped to be able to make some constructive proposals for infusing more life into Association activities. Members commended the Secretary for the steps he had already taken to assist Branch Secretaries and simplify their work.

Resignation

The resignation of Mr E. J. Kirk was received and accepted with regret. The Chairman referred to the long service of Mr Kirk on the Executive and his constant interest in matters affecting the welfare of the beekeeping industry. Several speakers expressed appreciation of the work he had done and of his value to the Association both on the Executive and as a delegate at Conference. It was decided that a suitable minute be placed on record and that a letter of appreciation be sent to Mr Kirk.

On the motion of the President, seconded by Mr J. W. Fraser, it was decided unanimously that Mr W. T. Haines, of Kaitaia, be appointed to fill the vacancy.

Diploma in Beekeeping

At the invitation of the Executive, the Director of the Horticulture Division attended the meeting and a discussion took place on the advantages to be derived from the establishment of a Diploma of Beekeeping or some similar accepted standard. It was felt that a recognised qualification would be of value to those working within the industry and would give them, and the industry, wider recognition in the field of agriculture. Eventually it was decided that the Secretary approach the Institute of Horticulture, as the appropriate authority, with the object of setting up a Diploma in Beekeeping.

FOUND A BEE IN HIS BURROW

A surprise was received recently by Mr J. Jamieson, a well-known Carterton farmer who, on seeing a rabbit enter a burrow, tried to catch the rabbit.

He went to the burrow, lay down, and plunged his hand in.

It was the wrong burrow, and Mr Jamieson had put his hand into the centre of a subterranean bee hive.

The numerous stings he received required medical attention.

THE NATIONAL BEEKEEPERS' ASSOCIATION

An Invitation

"The N.Z. Beekeeper" is the official organ of the National Beekeepers' Association of New Zealand (Inc.), an organisation for the advancement of the beekeeping industry in New Zealand. In the fifty years or so of its existence the Association has identified itself with the movement toward better beekeeping and better marketing, and the voluntary services of its members down the years have contributed to the present status of the honey industry.

The Journal is circulated not only to members but to all beekeepers having 30 or more registered hives. The objective is to provide a news service relating to the work of the Association, the Department of Agriculture, the Honey Marketing Authority, and other matters of general interest which will embrace all commercial honey producers. In this way it is hoped that a spirit of unity, co-operation and progress can be nourished in the honey industry.

To those readers who have not yet done so the Executive extends a cordial invitation to become members of the Association Many benefits are to be gained from discussions and demonstrations at Branch Meetings and Field Days, especially as these functions provide a personal contact with Apiary Instructors and the marketing administration. In addition to the general advantages of membership most members avail themselves of the Association's insurance scheme, under which the beekeeper is covered (within limits) against claims resulting from injury to persons or property by his bees.

Beekeeping in New Zealand is now recognised as an important and reputable branch of primary production. Every responsible honey producer must be interested in the future of the craft, and he should consider it a duty to take an active part in the work of the Dominion organisation and so contribute his share toward the welfare of the industry.

A list of Branch Secretaries may be found on page 2 of this Journal, while the subscription and insurance rates are given inside the back cover. The financial year of the Association commences on June 1st. Beekeepers who wish to join are invited to do so by completing the form overleaf. We recommend that it be forwarded to the nearest Branch Secretary in order to secure the extra benefits of Branch membership, but where this is not convenient the application can be sent direct to the General Secretary. Direct Members, as well as Branches, are kept fully informed of the work of the Association.

Present members may also use the form to renew their subscriptions for the coming year.

APPLICATION FORM

(Please read information overleaf)

Date.....

The Secretary,

.....Branch,

.....

(Or the General Secretary, P.O. Box 19, Foxton.)

* Please enrol me as a Member of your Association.

* Please renew my Membership in your Association.

I have a total of.....colonies in.....registered apiaries and enclose:—

	£	:	: being Annual Subscription and
	£	:	: being premium for Apiary Insurance.
Total	£	:	:

Signed.....

Name and Full Address (block letters):

.....

.....

.....

** Strike out line which does not apply.*

HONEY MARKETING AUTHORITY

LETTER FROM THE CHAIRMAN

The prices we are obtaining for our honey overseas have improved slightly and this has now made export a better proposition than selling in New Zealand.

I realise that many producers are still not recovering the costs of production and no beekeeper is getting an adequate reward for his labour and capital invested, but unfortunately we cannot increase our prices in New Zealand because of price control.

The members of the Authority have agreed to an application being prepared for the removal of price control on the Authority's packs, and should this be granted we should be able to sell a certain amount at any rate of good quality honey at a payable price in New Zealand. It is unfortunate that your Executive, after hearing our case for removal of price control, informed the Minister that it should be retained.

Plans and specifications will soon be completed for our new building and we are still hopeful that it will be ready for occupation for next season's honey crop. We are doing our best, but those who have done any building recently will fully appreciate the problems and delays one encounters.

Honey contracts have caused us a good deal of worry this year owing to the poor season experienced in many parts of the country. The Authority had decided that when a beekeeper has failed to produce his contract honey, it would be right and proper to pay the contract premium provided the producer sends in all honey produced other than door sales to consumers. We hope this will help many who would otherwise have lost their premium. Any contractor who wishes to obtain the benefit of this concession should write to the Manager.

Since the Authority took over the marketing of honey from the Marketing Department the contract system has been continued in the hope that it would assist us in contracting overseas. The system, however, has proved to be of little value to the Authority and it may be necessary to abolish it next season.

It has been found that in a good year the organisation receives ample supplies, but in a poor year when production is down many beekeepers are unable to complete their contracts, and in practice the Authority cannot make firm commitments overseas until the honey is actually in store.

In conclusion, I would say the Authority's efforts are slowly but surely bearing fruit, and while we must not be over-optimistic, nevertheless there is no need for pessimism at the present time.

E. A. FIELD, Chairman.

REMINDER TO BEEKEEPERS

CONTRACTS

Suppliers to the Authority are reminded that the last day for sending in contract honey is the 30th June, 1956.

NON-CONTRACT HONEY

The 30th June is also the end of the season for non-contract honey and the pro rata method of payment terminates on that date. Consignments may still be sent to depots after 30th June, but they will be subject to special purchase arrangements in each case.

W. H. CHUDLEY, Manager.

DEPARTMENT OF AGRICULTURE
HORTICULTURE DIVISION

HONEY HOUSES

APPOINTMENT OF APIARY INSTRUCTORS AS INSPECTORS UNDER THE FOOD AND DRUGS ACT

Towards the end of last year the Health Department drew the attention of the Director-General of Agriculture to the unsatisfactory hygienic conditions of some honey houses and requested the assistance of officers of the apiary section in improving the standard of such premises. At that time apiary instructors had no control over conditions in honey houses and no right of entry for the purpose of enforcing hygienic requirements, but it was agreed that apiary instructors should as far as possible be the Government officers primarily concerned in maintaining satisfactory conditions in these premises.

After discussions between the two departments it was agreed that it would be in the best interests of the Beekeeping Industry and all concerned if apiary instructors were apointed as officers under The Foods and Drugs Act 1947, for the purposes of the Food Hygiene Regulations with powers to deal with honey house conditions whilst undertaking their other duties when visiting beekeepers.

Arrangements have been made accordingly and all apiary instructors have been gazetted as "officers" for the purpose of maintaining hygiene in honey houses and warrants issued to them.

Apiary instructors have been requested to draw the attention of beekeepers generally to the requirements of the Food Hygiene Regulations.

Generally speaking it is realised that honey houses in New Zealand are of a high standard but the co-operation of all beekeepers is sought during the current off-season to bring the less hygienic honey houses up to the required standard before next honey extraction season. Failure to do so will necessitate action by the Health Department in association with apiary instructors.

I trust that it will not be necessary for any Apiary Instructors to have to report the failure of any beekeeper to bring his premises up to the required standard.

A. M. W. GREIG,
Director of the Horticulture Division.

3rd May, 1956.

Trends in Beekeeping

Apiary registrations show a definite trend towards consolidation of hive holdings by many full-time commercial beekeepers and the movement of many apiaries to more productive areas or to areas where better grades of honey are available. Also to offset uneconomic operating costs some producers have reduced their hive holdings to a one-man economic unit while others have increased their apiaries and hives to a level enabling them to employ permanent assistants to advantage. The number of domestic and semi-commercial beekeepers fluctuates according to seasonal conditions and other factors which do not unduly affect the average commercial beekeeper.

The latest available beekeeping statistics at 31st May, 1955, show a total of 5237 beekeepers operating 11,166 registered apiaries containing a total of 180,409 hives of bees, of which 6233 apiaries and 159,618 hives of bees are kept by commercial beekeepers owning 30 hives and over.

Honey Production for 1955-56 Season

Very difficult beekeeping conditions were experienced in all districts except the West Coast of the South Island, Hawkes Bay and sheltered areas in the Auckland district and coastal areas of Otago and Southland, where crops range from average to good. In other important beekeeping districts, particularly inland areas in Canterbury and Otago, prolonged spells of dry weather conditions seriously affected honey production from main nectar sources. Unsettled windy conditions had a similar effect in Bay of Plenty and Taranaki districts.

Honey crops generally tend to be slightly darker in colour than usual owing to the influence of honey gathered early in the season from mixed sources when conditions were more favourable. The proportion of manuka honey in the total crop in Northland, however, will be much less than usual and the honey there is of a higher standard of colour and flavour than previous years.

Production from commercial and domestic apiaries for the year ended 31st March, 1956, is estimated at 4600 tons of honey and 161,000 lb. of commercial beeswax, approximately 2400 tons of honey and 84,000 lb. of beeswax less than the previous season's record production.

Honey Grading

In the year ended 29th February, 1956, covering part of two seasons' production, 34,470 cases each 120 lb. bulk of honey sent to receiving depots, established by the Honey Marketing Authority at Auckland, New Plymouth, Christchurch, Greymouth and Dunedin were graded, 9138 cases more than the previous year. A total of 1286 cases of bulk honey could not be exported in the original condition because of low specific gravity. Four tons of honey submitted for grading were found to be unsuitable for marketing, 10½ tons less than the previous season, and was rejected.

Bee Botany

Last year the Horticulture Division of the Department of Agriculture took over the work of pollen analyses of honey, which forms the basis for work on many problems affecting the beekeeping industry. This service was previously provided by the Botany Division of the Department of Scientific and Industrial Research to a limited extent when time could be devoted to it. The identification and interpretation of the pollen content in honey is specialised work requiring considerable study in the field as well as in the laboratory. The Division's Botanist, Miss L. H. McDowall, had a period of training with Mr W. F. Harris (now with Soil Bureau) and has since collected material for reference slides from various parts of New Zealand. A comprehensive pollen survey of the honey producing districts has been planned, and commenced in South Canterbury and Central Otago over the 1955-1956 season.

Pollen analysis can be of value to the industry in many ways. In countries which have to import honey the object of bee botany would be to protect the consumer in respect to the description of honey offered for sale and to assist seed and fruit production by securing adequate pollination. In countries which export honey there

is the additional object of aiding the producer in a number of ways to overcome problems which may be wholly or partly investigated by botanical methods:

- Bees poisoned by sprays used for plant protection.
- Pollination leading to better seed and fruit production.
- Nectar and pollen sources of economic importance to beekeeping.
- Marketing problems such as misleading description of honey.
- Examination of certain intended imports to determine honey content (if any).

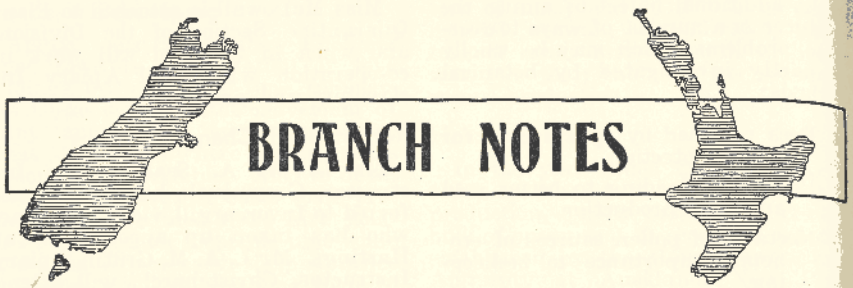
Undesirable sources of honey can very often be traced through the pollen content of a sample and advice can be given on the siting of apiaries to take full advantage of any particularly desirable source of honey, etc.

Miss McDowall is attached to Plant Quarantine Section of the Division, and when in the field will work in co-operation with local Apiary Instructors and producers.

Recent Staff Changes

Mr D. W. A. Seal, Apiary Instructor, Greymouth, has been transferred to Invercargill, vice Mr S. Line, who has taken up appointment at Hastings. Mr L. A. M. Griffin, Apiary Instructor, Christchurch, will attend to any urgent matters at Greymouth periodically until a fresh appointment is made to fill the vacancy at that centre, which is being advertised. Meantime beekeepers in the West Coast, Nelson and Marlborough areas should continue to address all correspondence to the Apiary Instructor at Greymouth as usual.

T. S. WINTER,
Superintendent,
Beekeeping Industry.



SOUTH AUCKLAND

A Field Day was held at Matamata early in March which was again well attended. Perfect weather and interesting items made the event most successful.

A most competent demonstration of soldering was given by Mr C. R. Paterson, the highlight of which was the production by one member of a piece of honey house equipment that he had not been able to solder, and his suggestion that the demonstrator might wish to do something useful while he had the iron hot!

Mr W. Nelson gave a very informative address on marketing matters of the moment and many questions were asked.

Mr Lorimer gave a report of the actions of the National Executive.

Mr John Joy brought a cappings melter which was obviously very efficient though of some considerable size. His report of putting through 2000 frames in a 40-hour week was impressive.

A vibrating uncapping knife was demonstrated, and also a novel way of packing 60 lbs. of honey in plastic bags.

Mr Paterson then showed some excellent slides on nectar sources and accompanied them with a first-class commentary.

Together with the exchanging of crop reports and other interesting conversation, everyone enjoyed themselves thoroughly.

—R. R. Chandler.

[Editor's Note: Since writing the above report Mr Chandler sailed on 6th April for Europe on holiday, and expects to return in September. We look forward to hearing from Bob when he comes back and we all wish him a pleasant and interesting trip.]

WEST COAST

The season on the Coast has been average to good. Yields vary considerably as the Coast covers a very long stretch with varying conditions and many types of nectar sources. However, reports from different districts include crops of 12 tons from 140 colonies and 11 tons from 120 colonies. In most cases the quality is very satisfactory.

I think that it will not be long before the wild West Coast will be able to show several well-equipped honey houses, judging by the number of tinned steel vats and expensive clarifiers our local tinsmith has made. Producers generally are using better equipment in order to pack a good quality product. Well can I remember when my mother cut up the comb, mushed it with a big spoon, and strained the mess through a bag—and very willing to do the job for the few extra shillings that the honey brought in.

A general meeting on the 13th April was well attended. Though our membership is small, the percentage who attend is good. How many branches can boast of a member who travels 100 miles to meetings, as does Mr S. Graham from Waiho Glacier to Grey.

Members, particularly the older ones, were pleased that Mr North, who many years ago was an active member here on the Coast, while on a visit to Grey found time to come to the meeting and renew acquaintances.

Branch members were sorry that the meeting would be the last with Mr Des. Seal, who has been our Apiary Instructor and has now transferred to Invercargill. All agree that he carried out a difficult job over a very large territory in a quiet, helpful, yet capable manner. We wish him and his family all the best.

—Tom Holland.

CANTERBURY

Field Day

The Canterbury Branch held a Field Day on the 10th December, 1955, on the property of Sir R. Heaton Rhodes, "Otahuna," Tai Tapu. Mr P. R. Robins runs an out-apiary there, and the bees were used for the demonstrations. The land around Tai Tapu is very heavy but it was showing the effect of the long dry spell. The hives appeared to have about half to three-quarters of a super of honey.

The President, Mr Rob. Woods, welcomed members and visitors and introduced the new Apiary Instructor for Canterbury, Mr Griffin, who addressed us on hive manipulation and followed up with a practical demonstration with the bees.

Mr T. Pearson then introduced Dr. A. Qaiyum, of Pakistan, to members. Dr. Qaiyum, who is here to study our methods of beekeeping, addressed us briefly and described the native bees of his country.

Mr James Forster, of Timaru, was then introduced and described his activities over the last few years with bees in Ireland. Mr Forster, or "Jimmy" as he is known to older members of the Branch, was Secretary of the South Canterbury Branch from about 1933 and also when it became the Canterbury Branch, and retired in 1948. He went overseas to visit relations in Ireland that year and returned to New Zealand last year, having been away seven years. We are all glad to see him back and looking just the same.

After lunch, Canterbury's master of queen rearing, Mr Tom Pearson, took over and gave a detailed description of mating queens in baby nuclei: from the making of the boxes and the placing of combs and the sugar for the bees to feed on, and how and where to place the queen cell, and finally the shaking of a hive of bees into a super with a gauze screen lid. The bees were then sprayed through the screen with a weak solution of sugar and water and then left for a few minutes to settle down. They were then dipped out, a 1 lb. carton full at a time, and placed in their nuclei boxes without the loss of a single bee. Then to round off his talk Mr Pearson described the simplest of all queen-introducing cages. A square of wire gauze slightly heavier than is used for fly screens, 6in. by 5in., is turned up ⅜in. all round and pressed into a comb containing hatching brood, honey and empty cells. A lead pencil is pushed through the comb to form an escape hole for the queen in the cage and the hole is plugged with candy, which the bees will eat and release the queen. The percentage of acceptances with this introducing cage are said to be excellent.

Members were then taken on a tour of inspection of the gardens and old coaching stables by the staff at Otahuna.

Afternoon tea provided by the Branch, and after members had had a good "natter," the day was wound up with votes of thanks to the speakers, Mr Griffin and Mr Pearson; to Mr Dick Robins for the use of his apiary; and to Sir R. Heaton Rhodes and his staff for the use of the grounds at Otahuna.

Mr Robins extended an invitation to anyone wishing to inspect his honey house in Tai Tapu to do so on their way home, and a number availed themselves of the opportunity to see his extracting plant.

—R. R. Bushby.

SOUTH CANTERBURY

A most successful Field Day was held at the home of Mr and Mrs L. Robins, Pleasant Point, on February 4th, 1956. There was a record attendance, although the weather was not the best in the morning.

The President of the Branch, Mr H. Cloake, opened the meeting, which was followed by a very interesting

demonstration in the safe use of a sawbench for woodwork by Messrs Paterson and Bennet, of Hamilton. All beekeepers present gained some useful points as a result of this demonstration and we trust no fingers will be lost in future. A vote of thanks was passed to Messrs Paterson and Bennet.

After a picnic lunch was enjoyed in the sunshine, Mr R. Holland took charge of the programme as Mr Cloake had another engagement to attend.

The afternoon passed all too quickly. Many demonstrations were given, including one on queen raising by Mr Paterson, who showed a new way of raising cells without grafting, and answered many questions. Mr Robins explained the workings of his wax rendering plant, which was capable of melting wax on a large scale, and was designed to take out a lot of the hard work in wax melting. It was obvious much thought had been given to the setting out of this outfit.

A demonstration on soldering was given by Mr R. Davidson, which was followed with interest, as was also a demonstration of loading and unloading from a truck of six full supers of honey by means of a small tractor fitted up for the purpose.

During the afternoon the visitors inspected the honey house and equipment used in the extracting and processing of honey, and all were amazed at the size and set-out of the building, which is indeed a credit to Mr Robins, and we wish him the pleasure of many tons of honey to run through his plant in the future.

A vote of thanks to Mr and Mrs Robins for their hospitality brought a very pleasant day to a close.

—J. G. McKenzie.

NORTH OTAGO

The Branch chose a fine day and a pleasant venue for its Annual Field Day—February 25th at the Oamaru Gardens. Nobody worried about the absence of bee hives; in fact, it was appreciated in some quarters, and the children had a real day out on the swings and merry-go-rounds.

Visitors were present from Canterbury to Southland and an interesting range of apiary and honey house equipment was on display. The programme included talks and demonstrations by Messrs W. Irving and J. Horn (Loading Supers), I. W. Forster (Preparing Show Honey), J. W. Fraser (Double Queen Hive Simplified), J. McFadzien (Combs), and T. E. Pearson (Honey Marketing).

OTAGO

In February the Branch held a very interesting and enjoyable Field Day at the home of Mr and Mrs T. L. Jackson at Milton. The weather was warm and the refreshments served under the shade of the weeping willow tree gave a picnic flavour to the event. In fact, it was a delightful outing for the city folk to relax for a few hours on Tom's farm, complete with garden, orchard, fowls, two cows and an entertaining pig, not to mention the bees. The demonstrators were Messrs R. Abernethy, J. Horn, T. L. Jackson, J. M. Marshall and J. W. Kennedy, and the meeting was also given an address on marketing matters by Mr W. T. Herron.

Officers elected at the annual meeting on April 30th were: President, Mr A. J. Shaw; Vice-President, Mr J. W. Kennedy; Secretary, Mr J. McFadzien; Committee, Messrs C. W. Foote and R. J. McConnachie.

—J. McFadzien.

SOUTHLAND

Honey was effectively brought to the notice of the 40,000 people who witnessed the Centennial Procession in March, when Southland beekeepers distributed from their entry in the procession a large number ¼ lb. cartons prepared for the occasion. The distributors on the float were careful to toss a few into the lap of the Cabinet, who were watching the parade from a dais opposite the Town Hall, and one member (could it have been the Minister of Agriculture?) was observed to leave his chair to retrieve a carton which fell short. While the honey did not receive as

much publicity as another peculiarly Southland product which was also being distributed (in bottles), the contents of the cartons were at least true to label!

The honey was eagerly sought after by young and old.

The central feature of the float was a half-ton tank painted to represent a standard print ten-pound tin, with two straw skeps at one end, balanced by two brightly painted hives at the other. Across the cab stretched a banner reading:

"A FOOD and A SERVICE"

while fore and aft over the truck body was the answer:

"HONEY and POLLINATION"

Considering the resources at our disposal, the float compared very favourably with others, on which hundreds of pounds had been spent, and reflected great credit on the Drummond party responsible.

The Annual Meeting this year has especial significance, being the 50th Annual Meeting of the Branch. Preparations are in hand to make the Anniversary Dinner in July an effective sounding board for the things which should be said on such occasions.

NOTES FOR BEGINNERS

By "Skep"

By the time this article is in print practically all surplus honey will be lifted from the hives, and if not extracted, at least stored under cover in the honey shed, and before extraction at a later date, will need to be warmed up.

Considering reports in general, it would appear that in most districts the crop has been light. Let us trust, not so in your case, my reader, for a beginner with a limited number of hives in one area stands to get a better return in proportion than the larger commercial man. However, whatever the results of the season, your preparations, no doubt already made, and in the making, for the coming season will, with wishful thinking, tend to carry you hopefully along. "Hope springs eternal in the human breast."

Seasonable Checkover

Just in case pressure of work has held things up, and a few matters have been overlooked, it may not be too late to adjust them now. Let us run over the main requirements for wintering down. Hives in good repair: Entrances well constructed to protect from rain, wind and mice; bottom boards slightly tilted to prevent lodging of water; good, clean, full-sized mats; rain-proof, well-fitting, secure lids. Ample stores of sealed honey left in each (at least 35 lbs.); reasonable amount of pollen in brood combs; stocks checked for disease, and queen right. Fences should be secure, but if no fence, and apiary is exposed to stock, a good idea is to place hives close together in a line, back to back, and a wire run over the top, to hold them from being disturbed by stock or wind. Take notice that whatever adjustments may be carried out now or during the next three months, hives must be kept as free as possible from undue disturbance.

Progress Duties

Following hard on the lifting of the honey crop and extracting, comes the necessary work of washing, cleaning, and sorting up of gear, along with the final preparation of wax, for marketing or for conversion into comb-foundation. Look over combs for the replacement of damaged ones; put aside damaged supers for repair and a coat or two of paint. Place good frames in the best conditioned supers and stack in as cool and dry a place as possible, preferably with newspaper between every, or every second super, and with moth deterrent

sprinkled in the super on top, and round the room. Secure from any danger from rats or mice.

There will be ample time during the next few months to consider increase of stocks, assembling and nailing materials, etc., and arranging for all necessary gear pertaining to same.

This is a good time for consideration of new apiary sites, because you can avoid choosing them in by-roads and paddocks of your district which are at all inclined to deteriorate in wet weather. Particularly feeding time in spring can be, and is, problem enough without the added inconvenience of wet and soft apiary approaches.

How this necessary work and planning, even for the beginner, mounts up, but fortunately there is ample time at this period to think them over, work out in theory and practice, and study printed matter available.

Urgent matters having been attended to, and the whole under control, you no doubt have found time, and with a clear conscience, to have taken your annual recess while the weather was reasonably fine and warm.

Domestic Calls

You will now be in that happy position, in the case of the family man, of catching up a little in the many and various jobs that the wife despaired of ever getting done, because of the prior call on your time of the ever-demanding bees. If you are a good and true bee-man, you will now be only too happy and willing to answer these calls. I have yet to find the beekeeper, large or small, who is not generally handy with shovel and spade, saw, hammer and plane, trowel and level, to say nothing of the paint brush. By the way, I have found that there are few shades of indoor decoration give better effect than the mixture called Frost Blue.

Honey

In the February issue I gave three headings on the Honey Bee: 1, History; 2, Production; 3, Culture, to deal with consecutively. I now come to the second subject: "PRODUCTION, THEIR PERFECTION OF FOOD SUPPLY." Honey is Nature's purest and most wholesome sweet, in most cases the accumulation of minute particles of sweetness from innumerable flowers of the field. When gathered from this source it is estimated that the bees visit 500,000 or more flowers to produce 1 lb. of honey.

New Zealand has an abundance of native trees, shrubs and plants that secrete honey freely, in different parts there are some 40 or more yielding honey during the period of August to March.

Today honey is very extensively used, and there are few other foods as convenient, wholesome and nutritious; while section honey is par excellence. Quoting from Edwardes' "Lore of the Honey Bee": "Honey is the ordinary sugar of nectar, concentrated and converted into what is chemically known as grape-sugar; and thus, in ripe honey, first and most important part of digestion is already effected before it is combed. This explains why so many delicate people, and particularly children, can assimilate food sweetened with honey when they can take no other form of sweetness. Doctors are continually finding some new virtue in honey. Its gently regulating action has been long known, and there is good authority for stating that there is not an organ in the human body which does not benefit from its habitual use... Honey is the main ingredient in nearly all patent medicines for the diseases of the chest and throat."

Referring to quality, he says: "Pliny the Elder (A.D. 23) ascribes the varying quality in honey entirely to the influence of the stars. When certain constellations were in the ascendant, bad honey resulted because their exudations were inferior. Honey collected after the rising of Sirius, the famous honey star of all the ancient writers, was invariably of good quality.... Similar virtues were possessed by honey gathered after the appearance of a rainbow."

However, today, modern beekeepers know that it is the nectar-producing flowers that are responsible for the quality of the crop, and "Skep's" advice is, "Keep your eyes on the fields instead of 'hitching your wagon to the stars.'"

PROTECTION FOR BEES

(South Canterbury Representative)

The complications and far-reaching ramifications of the effects of spraying of brassica crops with insecticides and the repercussions on the beekeeping industry were revealed in a lengthy discussion of the problems at the Provincial Executive meeting.

A remit from the Pleasant Point branch was under consideration: "That before any decision is made on the questions as put forward in circular A.80/1955 regarding bee mortality caused by insecticides, further investigation be carried out as we consider that insufficient evidence has been produced to show losses in the bee population where careful application of insecticides has been undertaken."

In a note to the remit the branch stated a case relating to crops of rape for seed purposes on a farm stocked with beehives. Last season the crop was sprayed and a good return of seed saved, no harm being done the bees. This season, under similar conditions, the owner was refused a permit and a 75 per cent. loss of seed was the result.

Mr A. D. Talbot, moving the remit, said the Pleasant Point members appreciated the position and realised that bees must be protected, but he asked the executive to look at the other side of the picture. Circumstances could arise where the supply of rape and other seed could diminish to a dangerous level.

Mr G. E. Gumbrell, beekeepers' representative on the executive, said there was a good deal of concern about the position as it affected the farmers and the beekeepers.

Four years ago, said Mr Gumbrell, beekeepers realised the implications to the industry of insecticide spraying and a conference of all interested parties was held. Nothing was done. The position had now got to the stage where apiaries had been wiped out as a result of toxic spraying of crops. Recently another conference of Government officials and representatives of interested industries was held and the Government, realising the potential danger of the trend of events, had sent the country's leading entomologist overseas to study the position.

Mr Gumbrell emphasised that it was imperative that legislation should be introduced to meet the position. "Apiarists do not seek compensation," he said, "all they want is protection from the careless use of spraying. Legislation similar to that regarding the spraying of fruit is necessary. If this is not given there may be a disaster which will take the apiarist half a lifetime to repair."

Spraying, according to experts, to be properly effective must be done in autumn or before buds came. All the apiarists were going to seek, and they felt they would get it, was reasonable protection from the indiscriminate sprayer. The remit from Pleasant Point, he stated, "protected the sinner." He advised that the executive should throw the remit out and await developments from an important conference between Government experts and appropriate departments and other interests concerned which would be held towards the end of February.

Mr J. C. Hurst moved that the matter be held over accordingly and that Federated Farmers ask for copies of any proposed legislation.

Mr F. J. Henshaw, emphasising the far-reaching effects of the problem, quoted the menace spraying had been in Hawkes Bay to the fruit farmers and market gardeners. It was indiscriminate spraying. The Health Department was also concerned with the possible consequences of toxics getting into honey. It was as important to the farmers that bees in their work should be protected as it was to the apiarists.

After hearing the discussion and the statement of Mr Gumbrell, Mr Talbot said he would withdraw the remit. His branch was concerned that the man who was prepared to be careful should not be prejudiced by the man who was not.

—"Straight Furrow," April, 1956.

WORLD NEWS

France

French beekeepers are fighting against indiscriminate spraying through radio announcements and articles in one of their biggest newspapers, "Figaro." In a hand-written letter, Dr. Albert Schweizer indicates that he is also taking the side of the beekeepers:

"I have heard about the tragedy of indiscriminate spraying of insects in France as well as elsewhere, and deplore everything that is happening in this regard. Modern humans can no longer think and look into the future. They are going to kill the earth from which we and other creatures receive our food. Poor bees, poor birds, poor humans. The facts speak for you. Fight! My heart is with you.

Yours faithfully,
Albert Schweizer."

Lambarene, June 15, 1955.

—From "Gleanings."

Queensland

We learn with regret that Queensland beekeepers, after some years of setbacks, have experienced one of the wettest seasons for many years. Many producers suffered severely when flood waters in the south-west part of the State invaded their sites at the end of a good flow. As well as hives, large quantities of honey, urgently needed for local and export trade, were lost.

Alaska

B. E. Montgomery, of Purdue University, has a sub-contract from the Arctic Institute of North America for a one month study of the ecology of bumblebees in the far north, at Point Barrow, Alaska, 300 miles from the Arctic circle. He will study the activities of bumblebees during the short Arctic summer, especially the kinds of flowers from which they gather nectar and pollen and the development of colonies. This will be his second trip to distant places to study the bumblebee. In 1949-50 he went to New Zealand to study the relationship of bumblebees to clover seed production there. At Purdue, since 1950, he has also devoted some of his time to a study of the utilisation of bees in the pollination of clovers and other legumes. He worked out a way to pollinate legumes and other crops by the use of bees in cages; allowing the production of three and four crops of seed a year in greenhouses, enabling plant breeders to make faster progress in developing new crop varieties. He also found a strain of clover that produces two seeds to the pod instead of one. It is now being tested to determine its value in increasing the productiveness of red clover seed.

—"American Bee Journal."

HONEY: A WORLD COMMODITY

By R. B. Willson

World commodity! These are big words to associate with honey: they summon up visions of shiploads of grain and sugar, truck loads of coal and iron ore, and bales of cotton and wool. But, as we shall see, honey is also a world commodity. A world commodity may be defined as one which has the same price at the same time throughout the world—quality, freight costs, and government-imposed factors such as duties being taken into consideration. The price is the same because there is sufficient trade to allow a rapid exchange of information between many producing (exporting) countries and many buying (importing) countries. Honey satisfies this set of conditions, and therefore operates on the basis of a world market.

Today trade in honey goes on steadily between Germany, Holland, Belgium, Switzerland, France and Italy (all buying countries which can pay in dollars) and the United States,

Canada, Mexico, Cuba, Guatemala, Salvador, Costa Rica, the Dominican Republic, Haiti and some other Latin American countries, all of which sell for U.S. dollars. There is trade too between the sterling-area countries: Great Britain on the one hand as buyer, and Australia, New Zealand, Argentine and Chile as sellers. Sometimes international trade balances enter into the purchasing of honey—between Germany and Argentina, Italy and Argentina, France and Mexico, and a number of other pairs of countries. In all cases, if Government restrictions are taken into account, the price for honey of similar grades is about the same.

There can be, and usually is, some variation. For example, the price of light amber honey in steel drums in Cuba may differ from the price of the same type in Tampico, Mexico by ½ cent (½d) per pound; but it will not differ by 20 or 10 cents, or even by 2 cents. It is more likely that both will arrive in Hamburg costing the German importer exactly the same amount, because they are of the same quality.

How does the price come to be the same? It is because the traders in honey throughout the world know the commodity and know its value. The importer in Antwerp, for example, knows that Cuban light amber honey is just as acceptable to the baker in this country making *pain d'epice* as is light amber honey from Tampico, and he will pay only the same (or about the same) price for either. The *torrone* manufacturer in Italy wants only fine white honey, which is costly. The Italian importer will buy U.S. white clover or Argentina white honey on an equal basis, perhaps favouring the U.S. honey with a slightly higher price because it arrives in containers which are easier to handle. These examples could be multiplied.

We can check our premise in another way. In post-war years, the United States had a honey surplus. But the U.S. Government also provided price support which raised the price of honey well above the world market price. In the first years of price support the Government bought large quantities of honey, much more than could be used conveniently or economically—by school lunch programmes or otherwise. American dealers could not sell for export, because their prices were too high for the world market. Then came the U.S. Government's programme for an export subsidy. With this subsidy, export prices were brought down to the world level or, in the beginning, to below this level; the Americans were then able to sell honey freely on the world markets.

Here is another example which shows that honey is a world commodity in a more striking way. On Easter Saturday 1954, Mexico devaluated its currency in terms of U.S. dollars, the value of the peso falling from 11.6 to 8 cents. There was a lot of honey in stock in Yucatan (Mexico), and the dollar value of all this honey immediately increased by 45 per cent. For a few weeks the Mexican Government virtually confiscated the extra profit to the Mexican exporter by taxing honey, along with everything else, with a 25 per cent. export duty. But even this duty was taken off after a few weeks, and it might have been thought that honey selling for 10 cents would then drop by say half the 45 per cent. to about 8 cents; but the price dropped temporarily only ¼ cent per pound, and within a very short time it was back at 10 cents, reflecting its value in the world market and disregarding monetary values at home—sure proof that honey is a world commodity.

Honey has indeed been a world commodity for a very long time. Before the widspread use of sugar in the eighteenth century it was *the* important sweet, and sugar has never replaced it in the *pain d'epice* and *nougat* of France and Belgium, in the *Lebkuchen* of Germany and Austria, or the *torrone* of Italy. Today the world trade in honey is considerable. For example, the United States is at present producing about 100,000 tons a year and exports about 10 per cent. of it. Argentina produces about 10,000 tons per year and exports half. Cuba and Mexico produce some 5000 tons a year and export virtually all of it. The Central American Republics together produce about 2000 tons a year, and almost all this is exported too. As a consequence, the sum total

going into the trade of the world from the Western Hemisphere alone amounts to an important tonnage—of a food obtained from a natural resource which, without honeybees, would have been wasted.

—From "Bee World."

MIXED STRAINS

I got a fine breeder from Canterbury,
She sure looked a peach of a queen;
Her laying was prolific and even,
And her bees were the best that I'd seen.

I raised a fine batch of queen cells,
And requeened one apiary complete;
The virgins mated with Waikato drones
Of a quality hard to beat.

I was sure of a bumper harvest
With everything set for the best,
But the actual result I'm afraid,
Left me feeling rather depressed.

The hives were full of field bees,
The clover was blooming galore,
But the bees all seemed to stay at home,
And no honey did they store.

I sat moping one day in the apiary,
Inclined to blow off my block,
When cocking my ear to an entrance
I got a terrible shock.

At last I found what was happening,
Why my hives no honey did yield,
Instead of getting out and working
They were sitting arguing about the Ranfurly Shield.

—"Box-hive Bertie."

NYLON STOCKINGS FROM OTAGO

(By Robert Davidson)

It was at the North Otago Field Day two years ago that the assembled beekeepers were rocked by a well-known bachelor from Dunedin starting off a demonstration on "Honey and How to Strain It" by introducing us married men to the finer points of nylon stockings, and what is more he convinced us in a few well chosen sentences that our knowledge of the stockings was vague and remote compared with his own. Our demonstrator began by stating that he had decided to improve his honey straining system and he insisted that nurses' white nylon stockings were the answer. At this stage I am not clear how or why he picked on nurses' stockings, but I can distinctly remember that he insisted on this type of wear. I admit that at the time I thought the method might be all right for the beekeeping and honey extraction enjoyed by Otago but for our tougher conditions in Canterbury such things would be useless.

The next stage in my education was during one of our not infrequent poor seasons when I was compelled to widen my field of honey buying to Otago and received a line of honey which proved to be entirely free from bees' legs, wings, visible pollen and other refuse. On inquiry I found the answer was "strained through a nylon stocking," and as this particular beekeeper has a nurse for a guide and director there was no need to inquire where he came by the silk stockings.

As usual, beekeepers neglect to give all the details when describing methods, and this was no exception. After several attempt I have now evolved a good straining system using a nylon stocking. The chief points about my system are:

(1) A gravity strainer and heater. Heater is 2000 watts. Strainer has three partitions and holds 850 lbs. of honey.

(2) The nylon stocking is definitely not a white one, as these cannot be obtained in a heavy gauge locally. The ones in use are of the heaviest gauge, and coloured.

(3) An outer envelope of straining material surrounds the stocking and prevents excessive expansion if much granulated honey passes the gravity strainer-heater system. This idea came from Central Otago.

(4) The stocking and outer envelope are attached directly to the end of the pipe line from the pump in such a way that they hang down into the tank and if convenient touch the bottom of the tank.

I am certain that two stockings, used on alternate days, would outlast our biggest honey crop. The re-

sultant honey requires practically no skimming.

Our bachelor friend from Dunedin could well add to this an article on "Nylon Stockings and How to Wash Them." All I can say from my limited experience is to let them soak in cold running water for two hours, and always handle them while they are wet.

[Editor's Note: We understand—from information received—that the special merit of nurses' stockings is derived not from any particular attribute of the prospective owners but from the colour of the garments. A honey strainer of white material looks clean and hygienic, and, furthermore, when in use in the honeyhouse, it looks like a honey strainer.]

GADGETS AND IDEAS

Feeding Dry Sugar

An article in "Gleanings" by R. A. Stauble describes a method of feeding dry sugar. The roof is removed from the hive and a rim 20in. by 16in. and an inch and a quarter high is placed on top. Most of the top of the frames is covered with several thicknesses of newspaper and the dry sugar is poured on top of the paper, the roof then being replaced. As much as six to eight pounds of sugar can be fed in this way. A sufficient supply of clean water should be available to facilitate the process of dissolving and storing the sugar.

I believe the greatest advantage of dry sugar feeding is in time and labour saved (writes Mr Stauble). After a momentary look at the colony's needs, just the right amount of sugar can be doled out, and the feeding can be finished in a very short time. With me this was a strong sale's point, compared with the mess and bother involved in feeding sugar syrup.

Besides, dry sugar feeding does not affect the colony as a stimulative flow as does syrup. I have experienced especially regular and solid brood patterns in dry sugar fed colonies.

In cases where a colony has become extremely weak it may not be able to handle dry sugar. In such situations, confining them to several frames and feeding them syrup may be their only salvation.

Why this system of sugar feeding works and so many others, such as feeding from the hive floor, do not, is, I believe, due to draft and temperature conditions. The bees can keep the small space added by the feeding rim at hive temperature with negligible extra effort. With the food on top of the frames, worry about draft from the entrance is at a minimum.

To Lighten Darkened Wax

When melted wax comes in contact with metal, especially iron, it will darken and become unattractive. It is very important that all enamel containers used for melting wax are free of chips and cracks. The nice yellow colour can be restored by sprinkling an abundant amount of flowers of sulphur into melted wax and stirring well. Iron and sulphur form an iron-sulphur compound which sinks to the bottom. The shade of yellow shows whether the iron has been sufficiently removed or not. The industry also uses sulphur to clean wax. Because of the danger of explosion it cannot be over-emphasised that private individuals should not use sulphuric acid.

—W. Hohnel in
"Deutsche Bienenzeitung."

Smoker Fuel

Pieces of wood which have been reduced by the weather to a spongy state are divided into fragments from nut to egg size, dried in the sun or the oven, and then soaked for two days in a solution of saltpetre and dried again. One fragment is lit and dropped into the smoker, which is then filled with wood shavings.

—D. E. Hilliard from
"Abeilles et Fleurs."

ABSENCE OF BEES HINDERS DEVELOPMENT

(By "Maeterlink")

In some parts of the Dominion the development and reclamation of new or derelict land is being hindered by the absence of bees. They are not present to fertilise the newly-established clovers. Consequently there is no reseeding.

On one block of 1400 acres of hill and undulating country recently brought back into pasture by the Lands and Survey Department I did not see a single honey bee. The clovers were in full flower, and one would have thought that the air would have been filled with Tennyson's "murmuring of innumerable bees." There were a few bumble bees about, but they are not very efficient fertilisers and frequently puncture the flowers.

With perennial white clover the loss of fertilit yin the seed is not a major setback, although it is a pity to lose the opportunity of increasing the density of this most valuable plant. With subterranean and broad-red clovers the losses may be severe, as they require an annual dropping of seed to maintain them in the pasture.

This undesirable situation also exists on other blocks of land, both Crown and private, where clovers are being introduced and reintroduced. Up to the time that the sowings were established there was no food for the bees. Naturally, they deserted these areas. Now they are urgently needed again.

I remember some years ago inspecting some 50 acres of newly-sown red clover in South Canterbury. There was every indication of a bumper yield of seed, but there was a complete absence of bees. The owner of this valuable crop induced an apiarist to park colonies of bees on the area. Both the apiarist and the farmer gained by the enterprise.

It might be possible for owners of properties where clovers have been freshly sown to co-operate with beekeepers in a like manner. Or they may establish colonies of bees on their own account. It is imperative that some action be taken to bring bees to these clovers.

With the expansion of aerial topdressing the acreage in clovers is increasing rapidly, and will continue to do so at an accelerating rate. The problem is big enough to warrant some organised steps being taken to bring the vitally necessary bees to land which has hitherto been unattractive to them.

—From "Straight Furrow."

WASP HABITS — GOOD OR EVIL?

The day after I wrote a note about the arrival of wasps in the South Island, Jim brought me one impaled on a cork. He had caught it in his kitchen, and since then has caught and seen others. Though I have so far seen none myself, I can't suppose that they have passed me by.

But when I suggested to Jim that wasps may help to keep the flies down and at the same time fertilise his lucerne, he said that if they did one of these things they would not do the other—that they could not be honey-eaters and also carnivorous. That sounded right to me, good logic and good biology; yet I was sure that I had read that wasps do have these contradictory habits. Though it was the blind trying to lead the blind I made another search through my books and found more than one plain statement by authorities that while mature wasps like honey, and in later summer live largely on the sweet juices of ripe fruit, wasp grubs are fed chiefly on chewed insects. There are, of course, wasps and wasps—about 1500 varieties, I think, altogether—and I still can't be sure that the variety we are said to have here, German wasps, are carnivorous, though I gather that they are to some extent. The story, if I have read it accurately, and with understanding, is that all wasps were carnivorous once, and that fresh meat is still a "primary appetite" with wasp grubs. Wasps do not, however, paralyse insects with their stings, as ichneumon flies do, and store them whole, but tear them to pieces with their jaws, chew them into a pulp, and then feed them to their larvae as birds feed their young, the hungry grubs protruding their heads from the cells and opening their mouths.

Nor does there seem to be any doubt that wasps fertilise or help to fertilise

some flowers. They can't, I gather, reach deep-seated honey, and therefore visit chiefly those flowers which are shallow and widely opened. That, I am afraid, makes them more useful to some of our noxious weeds (fennel, hemlock, hog-weed, for example) than to lucerne and clover, but they at least have sucking mouths, and in a million years will probably be able to do everything that bees do now. In the meantime they may be doing as much good as harm, if they have an unpleasant way of doing it. But I don't think that is the reason why the authorities have thrown up the sponge.

—"Sundowner" in "N.Z. Listener."

Reflections

. . . from the Editor's Desk

The Chemical Age

"The pesticides are here, so let's clean the place up" seems to be the cry nowadays. With the chemicals becoming available from time to time we could certainly clean the place up in a remarkably short time, but nobody would be left to tell the tale. Some indication of the possible results of this misplaced enthusiasm is given in the February issue of "Straight Furrow." "Weed-Killer Spray Kills Six Cattle" says one headline, and on another page "Indiscriminate Use of Cyanide Poison Angers West Coast Farmers." Like children playing with fire, we have treacherous weapons in our hands, and if we don't want to kill everything we must learn to use them with the greatest discretion.

Spray Warning

On the credit side of the account we notice that two articles on the control of insect pests (grasshoppers and army worms) appearing in the February and April numbers of the "Journal of Agriculture" are accompanied by the following warning displayed in a prominent panel:—

WARNING

The materials recommended in this article are highly toxic to honey bees and other beneficial pollinating insects. Though the treatment of non-flowering crops (pastures) as recommended in the article is not likely to have any serious harmful effect on these insects, operators must nevertheless exercise the utmost care to prevent spray (dust) drift on to neighbouring crops or pastures, particularly those in the flowering stage, or on to hives of honey bees in the vicinity of the area being treated. Before control measures on the lines indicated are undertaken the local instructor of the Extension Division of the Department of Agriculture should be consulted.

No portion of this article may be reproduced unless it is accompanied by the warning in the preceding paragraph.

A recent issue of "Straight Furrow" also devotes a half-page to the recommendations of the Department of Agriculture to be followed in the application of insecticides so as to avoid damage to bee colonies.

It is pleasing to find at least these notes of caution in the midst of a spray-happy community.

Scent Perception

Ronald Ribbands, writing in the "American Bee Journal," discusses the question, "What can the Honeybee Smell?" and describes some experiments made in this connection. "The results," he concludes, "establish that the honey bee's sense of smell is markedly superior to that of man, and there is, in addition, a possibility that bees are especially sensitive in their response to the scented compounds which make up their own body odours. Whether this is so or not, they can certainly recognise these odours, even in a fantastically small concentration. Their now demonstrated ability to distinguish between slightly different mixtures of scented compounds fits with their ability to distinguish between the body odour of their companions and that of bees from other colonies. The honey bees' sense of smell clearly plays a very important role in their activities."

Royal Jelly

The obscure properties of royal jelly have long aroused conjecture as to its possible commercial value, and in recent years, particularly in France, it has been used widely either directly or as an ingredient in medicinal and cosmetic preparations. As far as we know the claims made for it have not been substantiated by any reputable authority.

A significant development in the study of royal jelly now arises from the work of N. Weaver, described in the journal "Science." Worker larvae which were fed in the laboratory developed into essentially normal queens when given royal jelly taken fresh from the hive every two hours. However, when royal jelly was stored under various conditions and for various lengths of time, only worker bees were produced. This research shows that royal jelly contains either a highly labile substance (one that is likely to undergo change) or a substance which becomes unavailable to the honeybee larvae when the jelly is stored.

Until methods of preserving the biological activity of royal jelly are developed studies of its effect on other animals seem likely to yield misleading results.

Foul Brood Spores

"Gleanings" records that when Dr. L. Haseman (the prominent American research worker) visited the office recently this question was asked of him: "How long will AFB spores live?"

"Thirty years," was the stunning reply.

Back in 1924 the Missouri scientist locked up a honeycomb infected with American foulbrood, and in the years up to 1954 took periodic samplings of the comb. The last inspection in 1954 was still positive, and Dr. Haseman plans to continue this investigation until the tests show negative or the spores are dead.

CORRESPONDENCE

Appreciation

TO THE EDITOR

Sir,—Before leaving New Zealand I wish to express my deepest thanks to the Apiculture staff of the Department of Agriculture and to a wide circle of beekeeper friends for their guidance, assistance and warm hospitality during my seven months stay in your beautiful country.

Everywhere I have travelled all doors have been opened to me and everyone has endeavoured to furnish me with information and advice which has been of great value to me.

I will take back to Pakistan very happy memories of New Zealand and its people.

I have benefited greatly in my knowledge of bees and beekeeping and feel that much of what I have seen and learned can be applied in my own country.

I wish specially to convey my heartfelt thanks and good wishes to the following for their hospitality, material help and guidance:—

Mr and Mrs T. E. Pearson, Darfield; Mr and Mrs R. V. Glasson, Blackball; Mr and Mrs W. T. Herron, Waikaka; Mr J. McFadzien, Editor "Bee Journal," Dunedin; Mr A. Eckroyd, Christchurch; Mr and Mrs Harry Cloake, Timaru; Mr Clarry Hill and Miss Shepherd, Rangiora; Mr and Mrs J. van der Hoven, Darfield; Mr Hutchison; Mr and Mrs I. E. Pullin, Mount Roskill; Mr and Mrs G. B. Sharp, Matakana; Mr and Mrs W. I. Haines, Kaitaia; Mr and Mrs F. D. White, Kamo; Mr R. R. Chandler, Matangi; Mr Dudley Lorimer, Hamilton; Mr E. A. Field, Foxton; Mr A. M. W. Grieg, Director of Horticulture; Mr T. S. Winter, Superintendent, Beekeeping Industry, Wellington; Mr T. Palmer-Jones, Wallaceville Research Station, and his friends; Mr and Mrs R. S. Walsh, Grading Store, Auckland; Mr and Mrs E. Smaellie, Auckland; Mr D. Roberts, Auckland; Mr W. D. Seal, Greymouth; Mr and Mrs C. R. Paterson, Hamilton; Mr A. W. Bennet, Hamilton; Mr and Mrs L. H. Johnson, Palmerston North; and all others whom I have had the pleasure of meeting.

I conclude with a few words in my own Pakistani language and their translation in English:

"Newzealan Zindabad Beekeepers Paindabad."

"Long Live New Zealand and Her Beekeepers."

A. QAIYUM,
Govt. Bee Specialist,
West Pakistan.

The Price Order

TO THE EDITOR

Sir,—From information received it would appear that the Price Order has again come up for discussion, not by the common herd, but by the "Tops" of our industry. It is one of the jobs of the Honey Marketing Authority to dispose of our surplus honey to the advantage of suppliers, bearing in mind the Seals Levy, who pays it, and why. Apparently the H.M.A., after duly considering the factors involved, had recommended that the Price Order be removed. The National Executive would not support this progressive move, and fell back on their well-tried policy of "no change." Certainly the National Executive has the decision of last Conference before it, but if our representatives cannot take into consideration the altered conditions, and the H.M.A. recommendation, why do they hold expensive meetings merely to state what was passed at last Conference?

I maintain that the H.M.A. had the broader view, requiring the removal of the price order to help their pay-out, and incidentally (for us in the South Island) the market could never be better, for the removal of the Price Order, than this year. However, through the lack of initiative of a body, who consider that they represent the industry, the Price Order with all its limitations and variations is with us for an indefinite period.

For those taking a narrow view of the above, let me state that I am not standing for the next election of the H.M.A, and therefore am not electioneering, but merely stating my views of what I consider a retrograde step, which will do the industry lasting harm.—I am, etc.,

ROBERT DAVIDSON.

Timaru, 6/4/56.

After a strenuous day's shopping in town, Mr and Mrs Mann returned home in the moonlight.

"Oh, darling!" exclaimed the lady, "What a lovely moon!"

"Yes," he replied absent-mindedly. "How much is it?"

Classified Advertisements

WANTED TO BUY

One 8-frame Honey Extractor; state whether electric or manual. One Stainless Steel Container, approx. 600 lbs.—C. L. Harwood, 28 McLean St., Wairoa, H.B.

FOR SALE as a going concern: Apiary of 360 hives, with house situated in Christchurch. — Apply "Clover," c/o. The Editor, "The N.Z. Beekeeper."

FOR SALE: 160 60 lb. tins of Birch Honey (suitable S.I. beekeepers). Excellent bee feed. Guaranteed 100% disease free. Offers wtd.—Write C. A. Greig, Brightwater, Nelson.

FOR SALE: 8 Hives of Bees with winter stores. 8-frame extractor in good running order. One honey tank 1¼ tons; £55 or near offer for quick sale.—A. R. Lawson, 9 Whitaker St., Kawerau.

FOR URGENT SALE

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HIVE MATS

Cloth for hive mats is available in lengths of 70 yards by a width of 20 inches, the price being 1/3 per running yard, nett, f.o.r., Foxton.

For an extra charge of 7/6 per roll, the cloth will be cut into any lengths desired.

Orders for quantities of not less than one roll, accompanied by cash, should be sent to the General Secretary, P.O. Box 19, Foxton.

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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 J. McFadzien, 29 Nottingham Crescent, Calton Hill, Dunedin, S.W.1, not later than the first of month of publication.

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

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