# THE NEW ZEALAND BEEKEEPER

AUGUST, 1966

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

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# Friend and Foe

**ONE OF MAN'S** greatest friends since time began has also been his greatest enemy. Controlled and restricted to man's will, it provides warmth and comfort, but once control is lifted fire becomes the biggest, most cruel and devastating enemy that it is possible to imagine.

Two prominent beekeepers—one in the North Island and one in the South—have been the victims of the unexpected, and their honey house and premises were ravaged by fire during recent weeks. The queen-rearing establishment of Mr Allan Bates at Matamata, and the apiary and plant of Mr T. Penrose at Leeston have both been engulfed, and beekeepers throughout the country will wish these doyens of the industry well in re-establishing their businesses.

It is often difficult and sometimes impossible to pin-point the cause of fire becoming the enemy of man instead of the friend but when fires do occur they serve as salutary reminders to others to ensure that stock and plant are adequately insured to minimise financial loss. Valuations made 10 years ago would be found to be hopelessly inadequate at today's replacement cost, and the sum assured for total loss may well go only a small part of the way in paying for new equipment.

Another factor brought to mind is the imperative necessity to see that electrical installations are correctly installed and maintained in first-class order. Thermostats which stick and cause overheating, overloaded fuse boxes and wiring too light to carry increased loads are all potential fire hazards.

However handy your handyman may be, insist that electrical installations are installed by a competent electrician, and resist the temptation for a temporary "jack-up" of an extension wire intended for use for a few days. Days have the habit of becoming months and even years. The resultant short-circuit could be horribly expensive.

No sense in presenting yourself with an illuminated address.

*National Beekeepers' Association*

# DOMINION CONFERENCE

*at Whangarei, July, 6 - 8*

**The Annual Conference of the National Beekeepers' Association was held at the Town Hall, Whangarei, on July 6, 7 and 8, under the chairmanship of Mr Harry Cloake. Delegates from all over New Zealand were in attendance and the proceedings were formally opened by the chairman of the Whangarei Harbour Board, Mr Ralph Trimmer, after an address of welcome by the Mayor of the City, Mr J. F. Johnson.**

The 1966 Conference was particularly noteworthy for the warmth of welcome extended by the host branch to visitors and their wives, and for the lack of contentious remits which appeared on the Order Paper. So smoothly and amicably did business of conference proceed, that proceedings were terminated on the evening of the second day, leaving Friday free for visitors to see surrounding districts, or to return to their homes. The winterless North did its best to live up to its reputation of warmth and sunshine by fine weather for the first two days, but exemplified references to lush vegetation and forest growth by providing torrential rainfall on the last day. Visitors relying on transportation by air had to make alternative arrangements to head south, or wait for improvement in conditions. Subsequent conferences will be hard put to excell the arrangements made by the Northland Branch to make their visitors' sojourn more enjoyable, and the social events were very greatly appreciated by everyone.

In his opening remarks in reference to the conduct of proceedings, the chairman reminded delegates that one remit from last year's conference referred to the executive for action had proved to be incapable of solution by an organised body. To safeguard established apiaries from encroachment by overcrowding was an impossibility other than by legislation, or by the goodwill and common sense of beekeepers. A report could not, therefore, be presented to the present conference as had been requested.

Contrary to practice in some earlier years, remits were in the order in which they appeared on the Order Paper, and the business proceeded as follows:—

## REMITS

Remit numbers correspond to those appearing on the Order Paper, which in some cases were amended by unanimous consent of the mover and seconder. Remits not detailed were either withdrawn or lapsed. Movers of motions were permitted three minutes, other speakers two minutes, right-of-reply two minutes, subject in each case to extension at the will of conference.

**(1) CANTERBURY: "That in order to co-ordinate the operations of honey packers on the local market, the National Beekeepers' Association convene an annual packers meeting, one in the North Island and one in the South, with a view to establishing price stability in line with Honey Marketing Authority price guides".** (Newton/Bray). Carried.

**(2) CANTERBURY: "That the Executive prepare an up-to-date price guide for issue to beekeepers".** (Newton/Bray). Carried (Subject to legality).

(3) **CANTERBURY: "That future distribution of price guides issued by the Authority should be so timed that beekeepers receive them prior to the trade".** (Newton/Bray. Amended Forsyth/Ward). Carried.

(4) **GORE: "That there should be close liaison between the H.M.A. and the N.B.A. in future price guides".** (Glynn/Fraser). Carried.

(5) **BAY OF PLENTY: "That this Conference ask the H.M.A. that more emphasis be placed on the nutrition value of honey in their advertising".** (Barrow/Ward). Carried.

(6) **HAWKES BAY: "That Conference is of the opinion that Kimpton Bros. should be given notice by the Honey Marketing Authority that commission rates will be reduced to 2 per cent only".** (Gordon/Berry). Lost.

(8) **WAIKATO: "That the N.B.A. advise the Minister of Agriculture of the absolute necessity of continuous overdraft facilities to the Industry".** (Tuck/Forsyth. Amended Berry/Gordon). Carried.

(9) **HAWKES BAY: "That the Department of Agriculture Economics of Massey University be invited to prepare a proposal for full study of the marketing of New Zealand honey with a view to recommending possible improvements".** (Gordon/Berry). Carried.

(10) **WAIKATO: "That the H.M.A. actively pursue the question of the preparation and sale of darker honey with particular reference to the methods being developed overseas, and their possible application to N.Z. conditions".** (Forsyth/Tuck). Carried.

(11) **WAIKATO: "That the N.B.A. examine the current position as to the preparation and sale of beeswax, with a view to gaining a better return for this product".** (Forsyth/Lorimer). Carried.

(12) **WAIKATO: "That Conference expresses concern that there is no real opening for young men with degrees to enter the research side of bekeeping".** (Tuck/Forsyth). Carried.

(13) **OTAGO: "That the Executive investigate the feasibility of instituting a correspondence course in Apiculture to culminate in sitting the Dip. Apic. Diploma examinations".** (Glynn/Winslade). Carried.

(14) **WAIKATO: "That for the use of beekeepers, a map be kept in each Departmental Centre showing the position of each registered apiary in the area where more than 10 hives are kept at any time of the year".** (Forsyth/Tuck). Carried.

(15) **NORTH OTAGO: "That the Executive re-investigate the possibility of improving our strains of bees by importing disease-free bees".** (Winslade/Barber. Amended. Ashcroft/Hillary). Carried.

Note: Honey-bee eggs, larvae, pupa and semen are being successfully transported from the United Kingdom to the U.S.A. and Canada without transmitting Acarine disease. Mr Winslade referred to work being undertaken at Hawkesbury College seen by beekeepers during their recent Australian visit. Other speakers expressed support for a bee-breeding establishment maintained and manned by beekeepers, and which could have official approval.

(16) **SOUTHLAND: "That the Executive approach Government with a view to increasing the allocation of Import Licences to the regular importers of beekeeping equipment, and that applications by such concerns for special licences for prototypes, etc., of beekeeping equipment developed overseas be treated more expeditiously and favourably than at present".** (Barber/Holland). Carried.

(18) **WAIKATO: "In view of the dwindling supply of early nectar and pollen sources, an N.B.A. campaign for the nurturing and planting of flora for new sources be pushed forward".** (Tuck/Forsyth). Carried.

(19) **BAY OF PLENTY: "That research be carried out to find a suitable wasp bait which will eradicate wasp nests in inaccessible places".** (Barrow/Ward). Carried.

**(20) HAWKES BAY: "That this Conference directs the incoming Executive to ensure that letters to the editor, which refer to qualifications of persons shall be published only over the true signature and address of the writer".** (Gordon/Berry. Amendment Tuck/Lorimer). Carried.

Note: Cognisance will be taken of the will of Conference respecting the use of nom-de-plumes in the correspondence columns. The editor does not necessarily agree with any views expressed by correspondents whether published under a pseudonym or signature, and a subject of general interest is normally sufficient to warrant publication. Letters are sometimes received which are obviously not from the pen of the person whose signature appears thereon, but are written at the suggestion and instigation of another, and could therefore be equally construed as written under a pseudonym.

**(21) SOUTH CANTERBURY: "That this Conference considers the National Executive's scheme for additional finance to be too ambitious, and suggests they reconsider it".** (Knipp/Robins). Carried.

**(22) SOUTH CANTERBURY: "That the General Executive approach the correct authorities to obtain exemption from Military Service for beekeepers, between the months of September to March inclusive".** (Knipp/Davidson). Carried.

**(23) WAIKATO: "That future Annual Meetings of the N.B.A. assemble for the Conference on the first evening for the following business: (1) Issue of name tags; (2) Welcome and Official Opening; (3) Industry report, Dept. of Agriculture; (4) Marketing Report, H.M.A.; (5) Association Report and Balance Sheet".** (Tuck/Holt). Lost.

**(24) CANTERBURY: "That the 1967 Conference be held in Christchurch".** (Bray/Newton). Carried.

**(25) FAR NORTH: "That the notes on nectar sources, by Mr R. Walsh, Apiculturist, should be adequately published".** (Haines/Berry). Carried.

Note: Expressions of appreciation were made by a number of speakers on the excellence of Mr Walsh's notes and of their value to beekeepers. The Department of Agriculture, whilst being unable to publish the work, would give every co-operation. The General Secretary had already received firm orders for over 300 copies if procurable at a reasonable price, and enquiries were proceeding. Inclusion of illustrations, whilst highly desirable, might prove to be too expensive.

**(27) AUCKLAND: "That this Conference of Beekeepers express their appreciation of the services of part-time Apiary Inspectors and convey their desire to the Department of Agriculture for the work to be continued as previously".** (Blair/Belin). Carried.

**(28) AUCKLAND: "That the representation on the Board of the H.M.A. be altered to two members to be elected by the seals buyer and two to be elected by the suppliers".** (Blair/Belin). Lost.

**FROM THE FLOOR OF CONFERENCE**

**"That a Motion of Thanks be made to Mr T. E. Pearson for his work on the Agricultural Chemicals Board".** (Fraser/Hillary). Carried.

**LIFE MEMBERSHIP**

**"That Mr James Barber, of Pio Pio, be nominated as a Life Member of the Association in recognition of his 28 years of service to the Industry".** (Tuck/Glynn). Carried Unanimously.

In the course of laudatory commendations by a number of speakers from all sections of the industry, it was pointed out that the recipient had attended every Conference with but one exception for 28 years, and tribute was paid to his independant line of thought and action if necessary in the face of public opinion, and for the courage of his convictions. Messrs. Berry, Lorimer and Fraser of the Honey Marketing Authority and Mr Eric Smaellie of the Department of Agriculture added their tributes to this quietly spoken and unassuming man, regarded with affection by so many.

Mrs Barber was hurriedly summoned to share the pleasure of her husband's recognition, and in reference to her help to him through the years, Mr Barber recalled that she had always had his bag packed on time and without demure at his absence from home. The one and only time she "let him down" was when she forgot to pack his trousers for an important cricket match, and he was faced with the momentuous decision of playing without them or borrowing another player's.

**NOTICES OF MOTION**

**SOUTH CANTERBURY: "That this Conference views with concern the lack of co-operation between the beekeeping industry and other primary producing bodies, and respectfully suggests that full advantage be taken of existing avenues to further the welfare of the industry".** (Knibb/Robins). Lost.

**OTAGO: "That this Conference suggests to the Department of Agriculture that they consider the possibility of an interchange of departmental officers between New Zealand and Australia".** (Winslade/Tuck). Carried.

**CONFERENCE PROCEDURE**

**"That the Election of Officers shall be held on the second afternoon of Conference and that it be proceeded** with". (Holt/Lorimer). Carried.

**ELECTION OF OFFICERS—PRESIDENT**

The sitting President, Mr Harry Cloake, announced his intention not to seek re-election to office for a further term as President or as a member of the Executive.

**Nominations for the office of President** for the ensuing twelve months were: **1. Mr Percy Berry** (Gordon/Gavin); **2. Mr Trevor Wheeler** (Cloake/Lorimer); **3. Mr George Winslade** (Newton/Bray). Messrs Rope and Patterson were requested to act as scrutineers of the secret ballot, and the result declared and announced by the Secretary was that **Mr Trevor Wheeler** had been elected as President of the National Beekeepers' Association for the ensuing year.

**VICE-PRESIDENT**

**Nominated for office of Vice-President** were **Mr Bruce Forsyth** and **Mr George Winslade.** As a result of a secret ballot, **Mr George Winslade** was duly elected.

**MEMBERS OF EXECUTIVE**

Duly elected were: **North Island,** Messrs Don Barrow and Terry Gavin. **South Island,** Messrs Jack Glynn and Ralph Glasson.

## CONCLUSION

In declaring Conference closed for another year, the retiring President expressed his thanks and sincere congratulations to the Northland Branch for their outstanding hospitality, and in particular to the unstinting assistance of Mr A. G. Tucker, the Branch President, and to Mr Terry Gavin and the lady helpers behind the scenes in making the visit such a memorable one. Appreciaton to the speakers at Conference (most of which are published elsewhere in this issue) and to the officers of the Department of Agriculture and members of the H.M.A. were also made, and the hope expressed that every one would have a safe and happy return to their home. Formal business concluded at 6.30 p.m. on Thursday, July 7.

## LECTURES AND REPORTS

(Not published in full due to pressure on space).

**Mr T. Palmer-Jones** addressed Conference on his work, in collaboration with Mr P. G. Clinch, on the pollination of apple trees carried out during the blossoming period at Appleby, Nelson, where it was proved that the only insects of any importance as pollinators were honey bees and bumble bees. Honey bees were 18 tims as numerous on the flowers as bumble bees. Colour slides illustrated the methods employed for screening blossom to prevent pollination by bees and other insects, and the results of fruit set by insect visitation. The complete results of this research may be read in publication No. 123, Department of Agriculture.

**Dr Cumber's** absorbingly interesting address on his work on parasitical control of the passion vine hopper was amply illustrated by colour slides, and will be published in greater detail in a subsequent issue. Dr Cumber was hopeful that effective control would eventually be effective, but warned his listeners that the introduction of predators was a slow and sometimes disappointing procedure, that might take 15 years to be fully effective. Climatic conditions largely influenced the incidence of the hopper, and a large population explosion could be brought about by this uncontrollable factor. Time alone would tell, but he was hopeful, in the light of observations made so far, that eventual control of Scalypopa Australis would be achieved.

**Mr A. C. Ward,** Chairman of the Passion Vine Hopper Committee, set up to report on the hopper at the seminar held at Hamilton last year, said first reports came in on December 10 from Tauranga. On December 17 at Whakatane on a grape vine, on a private hedge a few days later and on wisteria in Waihi on January 18. First infestation of the hopper on tutu was at Whangamata on the same date, but proved to be very light. From a survey made of the Northland area from January 21, no hoppers of any consequence were found, neither was there honey dew. A survey of the Whakatane area in early February revealed heavy infestation of some plants such as privet, dahlias and other garden plants, but tutu in the same area was relatively free.

By the end of April most of the passion vine hopper had laid their eggs and died, and in the Bay of Plenty area there appears to be only one hatch of insects; from eggs laid the previous autumn.

It is apparent that the hoppers prefer many other plants to tutu, and because of weather conditions, the hopper was very late in appearing in the host plants. Because the 1965-66 season was moist, infestation was low, and honey dew could not have been collected by the bees even in the closed area.

**Mr T. F. Pearson,** the Association's representative on the Agricultural Chemicals Board, was unable to be present at Conference this year, but his full report was read. No losses have been reported from beekeepers as the result of the use of agricultural chemicals during the year. Since registration began in 1960, 1170 applications have been received, and in the current year, 146 new chemicals or changed formulations have had to be tested for relative toxicity to bees.

A paramount responsibility of the Board is to ensure that chemical residues in produce for home and overseas consumption are kept to the absolute minimum, and there has been some concern in isolated instances of D.D.T. residue in meat and dairy products.

Herbacides used indiscriminately continue to cause immense damage to orchardists and grapefruit growers, etc., and since beekeepers use these materials in clearing apiary sites, great care must be taken to prevent drift on to susceptible crops.

Following a request to the Board for re-assessment of procedure in the treatment of brassica crops, the Department have applied a measure which affords apiarists a maximum protection from a potential source of spring loss of bees without appreciably affecting the farming programme by instructing Farm Advisory Officers that general treatment of brassica crops must be applied either before or after the flowering period. Permits to treat crops in flower are only issued under very exceptional circumstances.

Case-bearer moth infestation of white clover is on the increase, and in some cases, seed loss is as high as two-thirds of the potential yield. Unfortunately, D.D.T. is not acceptable because of residue left on the straw and pasture. This is unfortunate, because it was effective and risk of serious loss to bees was low when applied in the emulsion form. The chemical Diptrex now being used is not as lethal to bees as some alternatives, but is toxic enough to cause appreciable loss if applied during fine weather when the bees are working the clover. Field Advisory Officers have been instructed to stress the necessity to observe care in applying insecticides to control case-bearer moth, but reports from clover seed areas would be most helpful.

# HONEY MARKETING AUTHORITY

Address by Mr. J. FRASER, Chairman of the H.M.A.

May I express the Authority's appreciation of the opportunity given me as chairman to address your Conference. In the two years since the existing financial arrangements between the Authority and the N.B.A. were made, we feel that results have been mutually beneficial, and my colleagues and I appreciate the co-operation received from your Executive and branches throughout the country.

Finance for the N.B.A. continues to be of concern to your Executive and to Conference. As I said last year, **"The decision will be yours. The Authority has only this to say:—Whatever scheme may be approved, we will do all we can to meet the wishes of the industry".**

The Report and Accounts for the year ending August 31 1965 has already been circulated, and I would only ask that in any discussion of them at this time you would bear in mind the period to which they refer.

The purpose of my address, and the opportunity for questions which you will have, is to inform you as fully as possible of conditions as they apply in the present season, which has been one of varying fortunes for honey producers.

## SUPPLIES, RETURN AND CONDITION OF SUPPLY

The supply of honey to Authority depots as at June 30 1966 was 1067 tons, an increase of 317 tons on last year, and a figure which in view of the total estimated Dominion production is considered very satisfactory and underscores the recognition by producers of the part played by the Authority, in creating stable marketing conditions for our product. It is worth emphasising that the influence of the Authority in achieving this stability is directly proportionate to the volume of honey supplied to it.

Average gradings are again high—less Light Amber and very little Medium and Dark Amber.

Condition of supply were virtually unchanged from the previous season, except for a reduction in the advance payment, on which I will comment later.

The with-holding payment system operating on certain classes of honey which have a variable market value has operated satisfactorily. I would like to explain that this with-holding payment is **not** a penalty but a prudent move to safeguard against loss on honeys of a particular type. Last year it was possible to refund in full the with-holding payment on Tawari and Manuka, and to make a partial refund of ¾d per lb on Kamahi.

The Returnable Container scheme is, in general, operating satisfactorily but I regret to say there have been odd instances of abuse, and I must remind producers that these containers are your property, and in the long run are paid for by you. The Authority has an obligation to penalise any abuse of the service offered.

The build-up of impurities through the repeated use of unwashed drums is a problem to which the Authority is giving attention, and they will in future be washed and cleansed by the H.M.A.

## FINANCE

Provision of working capital by way of Reserve Bank overdraft arrangements, under which we have operated for many years has on several occasions been a matter of concern ot the Authority. The increasing use of drum containers, both

five gallon and 44 gallon seemed likely to increase our difficulties. It was decided, as a first step, to reduce the advance payment, and subsequently the manager and myself were deputed to interview the Minister of Finance and put our position before him. I am glad to report that our representations were sympathetically received, and we are hopeful that there will be no repetition of occasional difficulties experienced in the past.

**OVERSEAS MARKETING**

Difficulties in maintaining continuity of supplies which would have arisen as a result of last year's short crop were to a great extent relieved by the existence of the White Clover reserve built up over the two previous seasons, and the average crop this year has retrieved the situation.

Prices for white clover have remained steady but E.L.A., L.A. and M.A. have been inflated due to short supply in these grades.

Overseas sales of packed lines remain steady, but costs have risen with increases in freights. Japan is, for all practical purposes, a closed market for N.Z. honey, owing to the availability of Argentine honey at prices around £100 per ton c.i.f., but prices for Argentine honey are rising.

Our overseas markets for retail packs can only be regarded as catering for the specialty trade—we cannot hope to compete with Australia as far as price is concerned. New specialty packs of selected floral sources are now being sold overseas, as well as in New Zealand, and we are awaiting the results with interest.

**AGENCY AGREEMENT**

A new agreement with Kimpton Bros. has been negotiated and is now in operation. (The terms of the new agreement were read in detail to Conference.)

**PLANT**

No major changes have been made during the year, and the factory has functioned efficiently.

**LOCAL MARKET**

Last season the Government Grader identified 36 separate floral sources in honey supplied to the Authority depots. Seven of these, which we can reasonably hope to supply in constant quantities, have been marketed under floral source brands. The introduction of these at the Auckland Easter, Waikato and Southland Winter Shows, in association with the local branches of the N.B.A. was very successful, and considerable interest in the trade has resulted. These packs are being sold at premium prices which have considerably raised the nett return from our local sales. It will be evident to all that this specialty business is only possible on a market which is not subject to price control.

An interesting feature of the year has been the steady sale of Niue Island honey as such. There is no doubt that we could successfully market larger quantities of honey from our island territories.

Total sales on the local market, both retail and bulk up to June 30 1966 amount to 516 tons made up as follows:—

| | | |
|---|---|---|
| "Honeygold" Quality | 160 tons (118 tons) | Last year in brackets. |
| "Imperial Bee" Quality | 204 tons (107 tons) | Last year in brackets. |
| Bulk for manufacturing | 152 tons ( 67 tons) | Last year in brackets. |

**PRICES: LOCAL MARKET**

Throughout last season the Authority honoured its commitment to Government to maintain price levels which existed at the time honey was freed from price control. When it became apparent (1) that cost increases would force a review of honey prices, and (2) that some sections of the trade were raising prices on their own account, producers were advised to follow market trends in their own areas and that the H.M.A. would be reviewing the price situation in March

in the light of the stock and cost situation. In March it was considered that these factors justified a rise of ½d in "Imperial Bee" and 1½d in "Honeygold". The industry was notified of the new prices it was intended to charge our customers as from April and a day later the same notice was given to H.M.A. customers.

Subsequent market reaction, showing increased sales, has indicated the acceptance of the price rise as a reasonable one. It is a matter for surprise that some packers have not followed the Authority's lead in this matter.

**SEALS LEVY**

The latest figures suggest that local sales are holding up in spite of the effect of last season's short crop. The fact that packers' sales appear to have remained constant, and the Authority's retail packs sales have increased by 100 tons, suggests that the Authority's increase represents increased consumption.

At the same time, and in apparent contradiction, the Authority has under study figures which tend to show a decreasing per capita consumption of honey within New Zealand.

The moral here is perhaps that there is no room for complacency, and constant effort must be made to exploit and develop all our markets, at home as well as abroad.

**PROMOTION**

No advertising has been devoted to our "Honeygold" pack for two years. The reserve of £1000 has been, and is being, fed into general advertising to meet the increased charges for radio time we already hold. The "Roving Bee" image has been developed in the School Project Scheme, in operation again this year, and in the colouring competition. This latter innovation has been most successful to date, despite the fact that it has not received the support from some sections of the industry for which we had hoped.

**GIFT PARCEL SCHEME**

Continues to show increased interest. Last year: 2984. This year: 4800.

**OVERHEADS**

Like all other industries we are caught up in the spiralling wage and cost structure. In the event of short crops as last year, the cost of overheads per lb are sharply increased to the point where payments for all grades could be seriously affected. To cushion the effect of the variable factor, an overhead Equalisation Reserve has been created.

**CONCLUSION**

If our difficulties grow no less, at least we gain in experience. In the past, despite disappointment in production, and intensive competition on world markets, the Authority can fairly claim to have carried out what I believe to be its primary function: the creator of stability and the provision of satisfactory alternative outlets.

In an atmosphere of goodwill among the various sections of our industry, however lively debates on questions of the hour may be, I see no reason why the Authority should not so continue to function, and play its part in the organisation of beekeepers in this country, to the envy of many in other lands with problems no less than ours, but with less available machinery for their solution.

# National President's Report to Conference

It is my pleasure to report to you upon the progress of the Association during the previous 12 months. The Association has made progress in some aspects and there is still much to do before we can be satisfied that it is fulfilling its function within the industry.

**BURSARY**

The National Study Bursary first envisaged at the 1961 Conference has now been brought to fruition. Early in January of this year applications were called for a suitable young beekeeper to travel to Alberta, Canada, under the National Bursary scheme. From 11 applicants, Mr Mervyn Cloake, of Timaru, was selected. The bursar left Auckland on April 14 and is now the guest of the Beekeepers' Association of Alberta. Reports received from the bursar indicate that every effort is being made by his hosts in Canada to see that every aspect of the industry is available to him and we must be indebted to them for their co-operation and assistance.

**DE-CONTROL OF HONEY PRICES**

Finally, after many years of price control, our industry is freed of this encumbrance. While in most areas prices have remained stable there is sufficient evidence that those who sell on the local market must take care to keep in touch with ruling selling prices and to know their operating costs. This Association has given what assistance it can in this matter but is limited by what it can do by factors outside its control. This freedom from control does open new avenues for the sale of special lines of honey which could be of benefit to the producer of what have been problem honeys.

**TUTU**

Progress, although slow, has been made in efforts to control the causes of this problem but it must be realised that we are not free of this problem. Investigation into biological control is still being done and the testing of honey gathered in suspect areas continues.

On September 9 1965, at Hamilton, a meeting was held to discuss this problem and as a result a committee comprising of one member from interested Branches of this Association with Mr Ward, of Waihi, as Convenor, was formed. This Committee will watch the conditions during the spring and summer, note the density of the passion vine hopper and report these observations to the Executive. Mr Ward has been very active and has reported the Committee's observations to the Executive.

It must be emphasised that the ultimate control of this problem is a long term project and tolerance from those beekeepers in the suspect areas must be exercised. Unfortunately, there are those who are not prepared to submit to the opinions of those working on this difficult matter. Recently, hives of bees were found within the boundaries of the prohibited area. As no permission has been given to place hives of bees in this area the officers of the Apiary Section took appropriate action. This infringement of a Statutory Prohibited Area is mute testimony of the actions of an irresponsible person or persons, and must not be tolerated. This is an example of what we may expect should there be any relaxing of the regulations controlling these areas.

**MEMBERSHIP**

Compilation of information to support our case for the Levy Scheme has revealed some interesting facts relative to the membership of this Association. Of those beekeepers with 250 hives and over only 74 per cent are members. A further analysis shows that membership is higher in the smaller Branches. Your Executive has made efforts to increase membership and it is hoped to reform Taranaki Branch.

It is also apparent that some of our members are not pulling their weight in the Association. They are not paying subscriptions in accordance to the number of hives they own. This situation should not exist. The Association is so important to you that it deserves not only every member's full support but that of every beekeeper. I ask that every member does all he can to see that as many beekeepers as possible are members of this Association.

**BRANCH VISITS**

During the year your President has had the opportunity to visit several Branch meetings and Field Days in the South Island and to attend the Seminar at Hamilton. These visits do prove most useful. Members have the opportunity to hear at first hand the problems facing the industry and to contribute their own opinions, which are stimulating. Provision should be made whereby the President can visit Branch meetings outside his home branch without great cost to himself and each year to attend one meeting in the Island where he does not reside.

**LIBRARY**

I have been advised by the Hon. Librarian, Mr C. E. Dawson, Timaru, that through the purchase of the extensive private library of H. R. Busch, of Hornby, who has retired from beekeeping, the Beekeepers Technical Library now has a range of books which covers many topics relating to bees, beekeeping and honey farming.

A list of nearly 200 books was circulated in the May issue of the N.Z. Beekeeper, and it is hoped there will be a greater inquiry for books now that the list is in the hands of the beekeepers. Before this list was circulated, loans of books had not been as great as the committee had hoped. The library consists of over 200 books and bound copies of magazines, plus an extensive range of pamphlets and reprints.

Orders are being placed for the importation of new publications which will make a further contribution to the education of our readers.

The book plates which have been completed will be engrossed with donors' names and attached to the books that have been donated.

On your behalf, I thank Mr Dawson for the care he has taken of our library.

**NORTH ISLAND SEMINAR**

Ably arranged by the Committee, chaired by the Vice-President, Trevor Wheeler ,the North Island Seminar held in Hamilton was a success. It is a healthy sign when the industry is interested in improving methods, techniques and its members are prepared to spend time in learning. Your Executive have recommended that such seminars be held at three yearly intervals.

**UNIFICATION OF HORTICULTURAL BODIES**

On June 14 last a meeting was held in Wellington to discuss the possibility of unifying all horticultural bodies. As this Association was invited to be represented by two members, the General Secretary and I attended.

The meeting decided that further investigations were needed and agreed that a forum comprising of representatives from each interested body be set up and meet to discuss common problems and to decide the possible forming of a Federal body.

Discussions at the meeting have shown that all horticultural bodies have problems common to each other and I do recommend that we continue to be associated with this movement.

**AGRICULTURAL CHEMICALS BOARD**

In my opinion it is not only our industry but also all agricultural bodies who should be grateful that Mr Tom Pearson has agreed to serve for a further term on the Agricultural Chemicals Board.

**JOURNAL**

Mr Les Goss has again turned out four good issues of the Journal. It is encouraging to know that the publication is valued by members, for the standard of articles is high and the knowledge to be gained extensive.

**HONEY MARKETING AUTHORITY**

The co-operation received from the Authority throughout the year has been for the benefit of the industry as a whole, and it is important that there exists at all times a sense of mutual trust and confidence.

**FINANCE**

The Association's financial position has not deteriorated; rather it has improved slightly. This has been assisted to a certain extent by the period being reduced to 11 months on account of the change in balance date. However, if the Association had to meet the full costs of publishing the Journal the accounts would have shown a loss for the period. The Honey Marketing Authority's assistance in this matter was for a period of two years and concludes this year.

With regard to the decision taken at the 1965 Conference that the Association's finances be based upon a levy scheme, I have to report that we are awaiting a reply from the Minister of Agriculture and a further report will be made to Conference.

On behalf of the Assoication I extend to the Director of Horticulture and all Officers of the Apiary Section of the Department of Agriculture, Research Officers, Wallaceville Animal Research Centre and all other officers of the various Government Departments with whom we have been associated during the past year, our appreciation for their continued assistance and co-operation.

To the Editor, Executive Members, General Secretary and all Branch Officers I extend my sincere thanks for the work they have done for the Association in general and their own position in particular.

# POLLEN SUPPLEMENTS FOR HONEY BEE COLONIES

By I. W. FORSTER,

Technical Officer, Wallaceville Animal Research Centre,
Department of Agriculture, Wellington.

## INTRODUCTION

The honey bee requires a fairly simple range of foods and in nature honey supplies carbohydrates or sugar while pollen supplies protein. Honey and pollen also contain essential minor constituents including trace elements, that fulfil the dietary requirements of the honey bee colony. Although less obvious than the hive's honey requirements, adequate pollen supplies are essential for the rearing of brood and the development of young bees after they emerge from the cell (Haydak 1934, 1937). Even temporary deficiencies in pollen supplies can upset the balance of the colony, resulting in dwindling of bee strength, intermittent build up with a consequent proneness to swarming, excessive queen supersedure, and reduction of life span of worker bees. Prolonged pollen dearth can reduce colonies to a state of pollen starvation which may be fatal unless relief measures are taken.

In New Zealand, bee colonies usually have access to sufficient suitable flora to supply their pollen requirements. In fact beekeepers are often embarrassed with surplus pollen which occupies valuable comb space required for brood rearing or honey storage. Against this background it is not easy to appreciate the problem of pollen deficiency.

However, cases of pollen deficiency, and even pollen starvation, do occur in New Zealand, and, with the steady elimination of such pollen sources as gorse hedges, and the general reduction of flowering weeds, this problem seems likely to increase. Where supplies cannot be built up spells of weather unsuitable for bee flight can quickly result in bees having insufficient pollen to maintain normal conditions within the hive.

Pollens vary considerably in quality. The protein content has been shown to range from 7% to 30%, and it appears that other constituents may vary to a similar degree (Todd and Bretherick 1942). Pollens are not equally attractive to bees, even when fresh, while age and manner of storing can also reduce their attractiveness and nutritive value (Haydak 1961). A colony may have pollen supplies and still suffer from deficiency of protein, or minor elements, because the pollen is lacking in food value or is unattractive.

The need for supplementing the supply of pollen in times of dearth or deficiency has long been apparent, and quite early in the century the feeding of pea flour mixed with honey was recommended (Simmins 1904).

Scientific and practical appraisement of the worth of various substances and methods of feeding them as pollen supplements has since proceeded in most beekeeping countries.

It has been explained (Snodgrass 1925) that all food eaten has to be digested and dissolved to allow it to be absorbed through the walls of the alimentary canal. Digestive juices, called enzymes, each specialise in dealing with a particular foodstuff so the effective diet of an animal is confined to those substances for which it has the appropriate enzymes. Undigested material is discharged as waste.

The range of enzymes possessed by the honey bee, in line with its fairly ristricted diet, is rather limited.

The honey bee can digest most sugars, the main exceptions being lactose, which is the sugar found in milk, and raffinose which is present in sugar beet and cotton seed. Amylase, the enzyme that digests starch, is not among the bee's digestive juices but is present in natural pollen which also contains starch. Bees can assimilate starch only in conjunction with natural pollen. They can digest proteins but have only a limited ability to deal with fats. This brief survey gives some idea of the rather complicated requirements of a pollen supplement. The problem is made more difficult because the honey bee can void waste matter only in flight, so that excessive amounts of undigestible material can easily overload the excretory system when bees are confined to the hive.

Over the years research workers throughout the world have tested a wide range of materials in an endeavour to find a substitute for pollen in the diet of the honey bee. Soya bean flour has proved to be the most suitable basic material. The variety produced by the expeller process, with a fat content not exceeding 7%, is the most suitable (Palmer-Jones 1947).

Apparently the soya bean lacks certain beneficial elements and various additives have been used to correct these deficiencies including natural pollen, dried skim milk, dried blood, casein and yeast. The most suitable mixture has been soya bean flour and dried yeast (Palmer-Jones 1947).

The Waite Agricultural Research Institute, Adelaide, South Australia, has investigated the nutritional requirements of the honey bee and, in conjunction with Kraft Foods Limited, a pollen supplement has been produced which sells under the name of Krawaite. This is a soft candy with Kra-Yeast, a by-product from the fermentation of molasses as the basic ingredient (Doull, Purdie and Haydak 1965).

A pollen supplement, besides fulfilling the hive's nutritional requirements, must be sufficiently attractive to ensure that the bees utilise it fairly readily. At times field bees will work supplement in a dry state when it is exposed in the open. This method of feeding has several disadvantages. Colonies cannot be depended on to gather supplement in this manner and when they do, wastage occurs during the packing of the bees' pollen baskets which usually takes place in flight. Suitable flying weather is required—frequently the very factor which causes the colony to be deficient in pollen.

Some success is reported in feeding dry pollen supplement within the hive (Langdridge 1966), but as nurse bees are not equipped to handle a dry powder within the hive they have to wet each portion painstakingly to allow it to be sucked up. Unless the supplement is made attractive by the addition of natural pollen the nurse bees are very reluctant to work it in a dry state. This method of feeding would appear to have limitations.

The accepted way to feed pollen supplement is in the form of a paste or soft candy placed in the hive (Palmer-Jones 1947). The dry material is mixed with sugar syrup or honey and has a consistency similar to that of natural stored pollen. Honey makes a more attractive candy than sugar but the risk of spreading disease must be taken into consideration.

The addition of pollen to a supplement will increase its attractiveness. But preparation of such a supplement is often inconvenient as it depends on prior trapping and storage of pollen. Also it has been shown that *Bacillus larvae* can be transmitted in trapped pollen (Hitchcock and Revell 1963).

In order to compare the value of various materials and methods, trials were carried out near Oamaru, between 8th October and 29th November, 1965.

## EXPERIMENTAL

The apiary was not in a pollen-deficient area and the bees had access to a normal range of pollen-producing plants. The trial was a direct test of the relative attractiveness of various supplements, and the efficiency of feeding methods, while comparisons of amounts consumed and rate of brood area development allowed deductions to be drawn as to the merits of supplements under various circumstances.

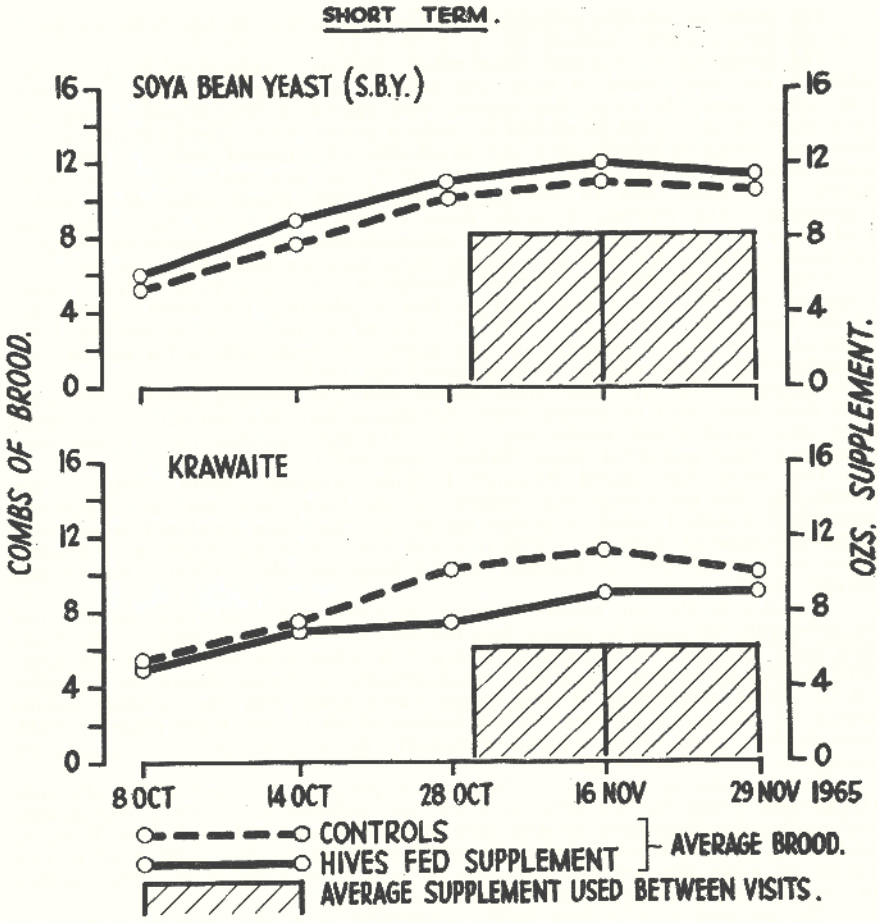


**Fig. 1 (a)—Short term. Consumption of supplements and area of brood.**

With the exception of the commercial product pollen supplements are designated in this paper in terms of the soya bean flour, dried yeast, and dried skim milk constituents; thus S.B.Y.M. means that all three constituents were used. The corresponding wet and dry supplements differed only in that water was added to the former. The ingredients of the wet supplements are given in Table 1. Protein contents are computed from figures given by Smith( 1966). Costs are assessed on present price of materials, and allowance made for normal trade distribution costs.

The Krawaite used was the standard quality available at the time of the trials. Shortcomings in the product have since led to changes in the ingredients so results shown are not necessarily relevant to the Krawaite being currently manufactured.

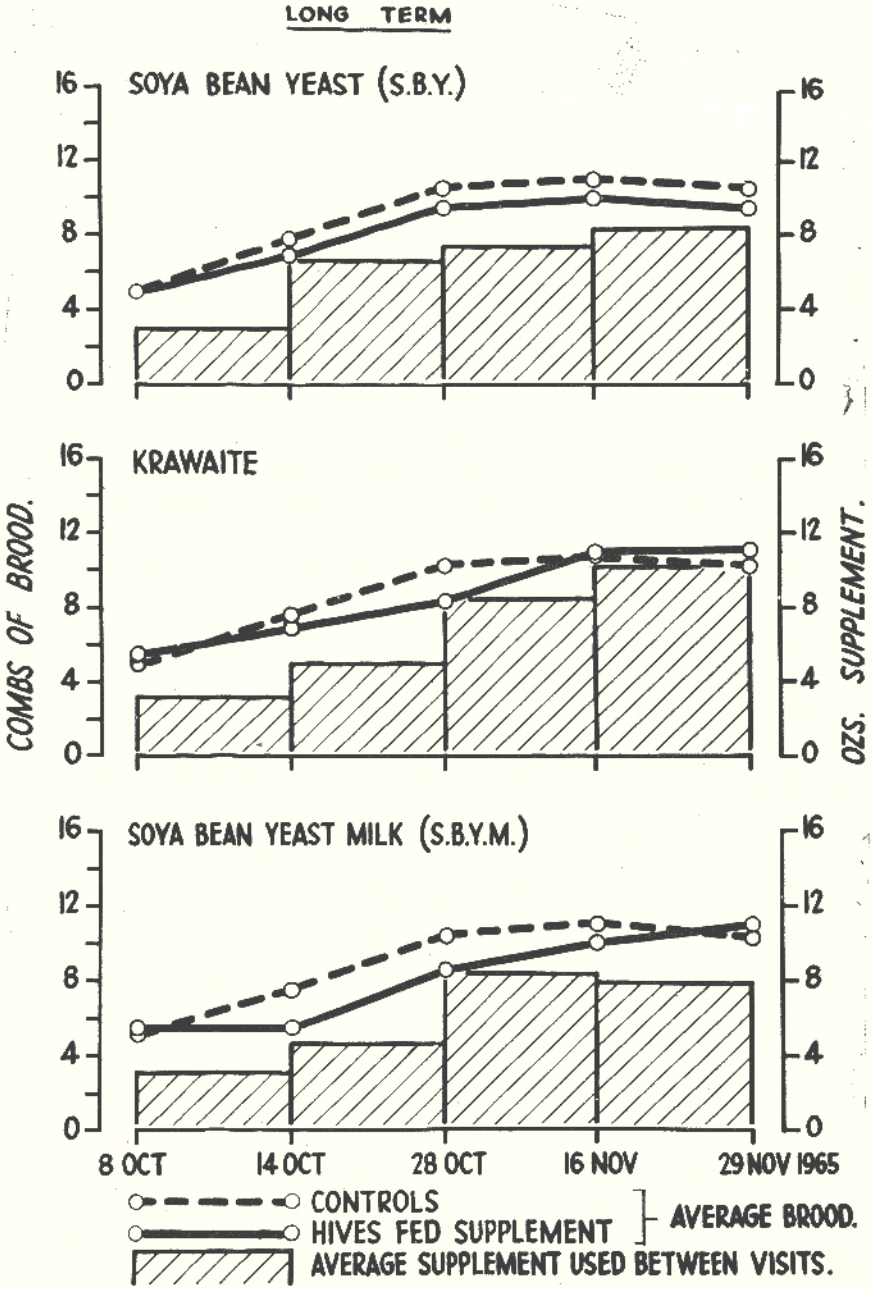


Fig. 1 (b)—Long term. Consumption of supplements and area of brood.

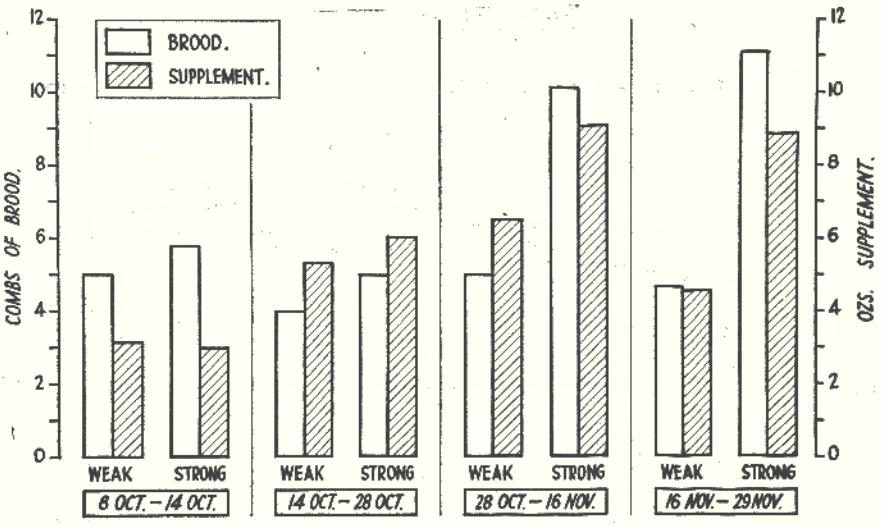


**Fig. 2—Effect of brood area on consumption of supplements.**

The two preparations fed dry (S.B.Y.M. and S.B.Y.) were placed immediately over the brood in feeders to which the bees had ready access. The three wet mixed were fed with the consistency of soft candy. Half pound pats, wrapped in greaseproof paper, were placed over the brood and as near to it as possible. The paper was broken on the underside to give the bees access to the supplement while exposing a minimum of surface to the effects of drying or moulding.

The cessation of dry feeding of supplements released hives for use during part of the experimental period. Supplements were fed "short term" to these hives from 2nd to 29th November. "Long term" feeding extended throughout the experimental period, from 8th October to 29th November.

The number of hives per long term treatment and for controls was four. Two hives were used for each short term treatment.

The rate of feeding was determined by colony requirements and generally all colonies had a continuous supply of usable supplement available. Control hives were given three ounces of dry sugar, corresponding to that fed to treated hives, each time test hives received supplement.

Wastage of supplements was measured by weighing amounts remaining in hives on 29th November.

## RESULTS

Little attempt was made by the bees to use supplements fed dry.

Weights of wet supplement consumed during the periods between brood estimations, and number of brood combs in hives, expressed as averages for treated and control groups, are shown in Figures 1(a) and 1(b). Results are summarised in Table 2. Figures 1(a) and 1(b) and Table 2 show that on an average rates of increase, and total increases, of brood combs for the supplements were similar to each other and to the values found for the control hives.

The effect of number of brood combs in hives on consumption of supplements is shown in Figure 2. This was compiled by classifying all hives fed wet supplements (Table 2) as weak or strong, according to their number of brood combs, and then plotting the average number of brood combs and weights of supplement consumed per hive in the groups. Each group contained six hives, increased to eight on 16th November through the inclusion of ones fed supplement for a short term. Hives were reclassified as weak or strong at the beginnings of each of the periods shown in Figure 2.

No supplement was observed to be thrown out or stored so it was accepted that the bees used all the material they removed.

Wastage by deterioration of supplement in the hive was significant only in the case of Krawaite where appreciable proportions of the amounts fed dried up completely . (It now appears that the particular line of Krawaite used had a tendency to dry up. It is understood that measures are being taken to remedy this defect.)

## DISCUSSION

The fact that bees did not utilise supplement fed in a dry state within the hive appears to be at variance with results obtained in Australia (Langridge 1966), and with reports from beekeepers who have successfully fed supplements in this manner. However, the supplement used in Australia in a dry condition contained pollen, which has a natural appeal to bees, and the main ingredient was Kra-Yeast which has been suggested as being attractive to bees because of its distinctive rum-like flavour. The dry supplement mixture fed by beekeepers is usually pre-dominantly sugar and their results were not critically assessed.

Consumption rates were closely related to the amount of brood in the hive. Supplement feeding did not affect the brood pattern significantly compared with that of control hives. It should be noted that control hives had supplies of natural pollen and it has been shown that pollen-fed hives are usually superior to supplement-fed hives (Palmer-Jones 1947, Purdie and Doull 1964).

Addition of honey or trapped pollen may make supplements more attractive but risk of disease makes such practices undesirable unless adequate safeguards can be devised. Beekeepers mixing their own supplements may have sufficient confidence to use honey and pollen from their hives.

A commercial pack, available ready wrapped, would greatly facilitate the feeding of pollen supplements although this would result in additional costs.

To test the relative feeding value of the different supplements it will be necessary to use an apiary in a pollen deficient area and plans are in hand to do this during the 1966/67 season.

## CONCLUSIONS

A mix of soya bean flour and dried yeast, with or without dried skim milk, containing 38% sugar but no natural pollen, cannot be successfully fed within the hive in a dry state.

When pollen supplements are fed inside hives as a soft candy, containing 32% sugar, bees will use them even when natural pollen is available.

The three mixtures, soya bean flour, dried yeast, dried skim milk; soya bean flour, dried yeast; and Krawaite are consumed at similar rates when fed in the hive as soft candy.

It is difficult to make general recommendations as to when and where to feed pollen supplements. In most areas it is not easy to foresee just when pollen shortages will occur. The effect of deficiencies in quality would be still more difficult to anticipate. To feed pollen supplement throughout the build-up period as an insurance against pollen deficiency may be worthwhile but would involve considerable labour and expense.

Beekeepers will learn to recognise a seasonal pattern that could result in pollen deficiencies only by studying conditions in their own districts. Undesirable colony symptoms that have no obvious explanation could well be suspected as due to pollen deficiencies, and trials should be made to see if they respond to the feeding of supplements. The effective use of pollen supplements must be treated as another skill in the art of beekeeping which requires considerable study if worthwhile practical results are to be obtained.

**TABLE 1—POLLEN SUPPLEMENTS**

| Supplement | Ingredients | | | | | | Price per pound (in bulk) |
|---|---|---|---|---|---|---|---|
| | Soya bean flour | Dried yeast | Dried skim milk | Sugar | Added water | Total protein | |
| | % | % | % | % | % | % | |
| S.B.Y.M. | 38 | 4 | 10 | 32 | 16 | 25 | 1/2½ |
| S.B.Y. | 47 | 5 | — | 32 | 16 | 26 | 1/4 |
| Krawaite* | | | | 34 | | 12.75 | 2/6 |

* A commercial product. Full composition unknown.

**TABLE 2—POLLEN SUPPLEMENTS: AVERAGES OF TOTAL CONSUMPTION, WASTAGE AND BROOD INCREASE (8th OCTOBER - 29th NOVEMBER, 1965**

| Supplement | Amount of Supplement (oz.) | | | Brood increase (combs per hive) |
|---|---|---|---|---|
| | Fed | Used | Wasted | |
| S.B.Y.M. | 24.0 | 24.0 | Nil | 5.5 |
| S.B.Y. | 26.7 | 26.5 | 0.2 | 4.5 |
| Krawaite | 26.6 | 24.2 | 2.4 | 5.5 |
| S.B.Y. (short term) | 16.0 | 16.0 | Nil | 5.0 |
| Krawaite (short term) | 12.0 | 8.0 | 4.0 | 4.0 |
| Control | — | — | — | 5.0 |


## ACKNOWLEDGEMENTS

The author is grateful to Mr T. Palmer-Jones, Scientist, Wallaceville Animal Research Centre, Department of Agriculture, Wellington, for help in planning the trials. Mr G. Winslade of Oamaru assisted greatly by making an apiary available.

Thanks are due also to Mr A. W. Barkus, Wallaceville Animal Research Centre, for construction of the figures.

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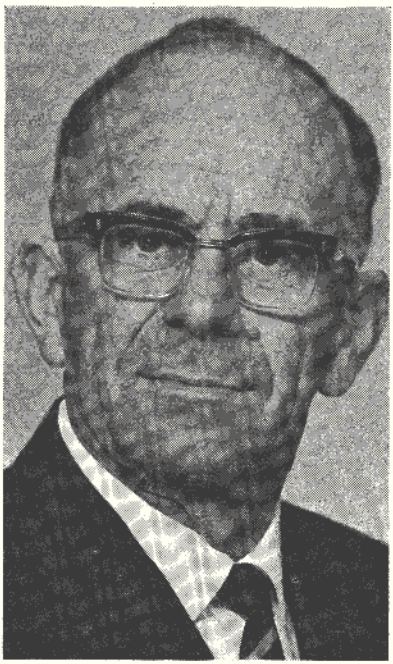
*Three members of the Waikato Branch give their time to man the stand at the Winter Show. Considerable interest was aroused in the special floral honey packs, and a useful quantity of honey was sold to the public.*

# HONEY MARKETING AUTHORITY ELECTION 1966



***PRODUCER***

***REPRESENTATIVE***

Events since my election to the Authority will have left few in any doubts as to where I stand on Honey Marketing policy.

You will know too of the effects of my action to ensure that electors have available to them the full information that is rightly theirs.

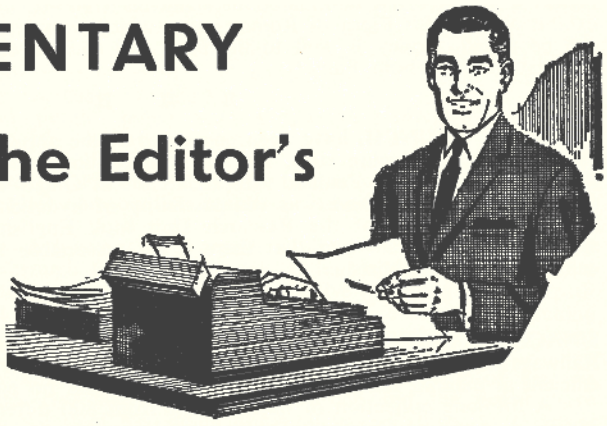
There is a great deal yet to do, however, and I shall again be offering my services at the forthcoming election so that I may continue my efforts to improve the standards of administration in the industry and to better the lot of all beekeepers in New Zealand.

In common with many who have everything at stake in beekeeping, I am deeply concerned at the present state of both the economic and political health of our industry.
A full declaration of my policy together with supporting information will be mailed to every voter.

(Signed) PERCY BERRY.

# COMMENTARY

## from the Editor's Desk and Mail



**OUR ISSUE OF MAY LAST** described the Editor of the Australian publication "Apiculture" as the Director of the W. A. Department of Agriculture, whereas in fact the designation should have been Senior Apiculturist and head of the Apicultural Section. Apologies for the misprint.

II II II

**THE IRISH BEEKEEPER** has compiled a draft contract to form the basis of agreement between Irish orchardists or farmers and beekeepers for the hire of hives for pollination purposes. The grower undertakes to pay £3 for each colony, agrees that any emergent swarms are the property of the beekeeper, and undertakes not to spray or dust poison likely to be harmful to colonies and to be responsible for any damage so caused by the hirer or his servants. The agreement also stipulates four clear days notice to move hives to a crop site and the same time to remove them. The apiarist has to deliver colonies at his own cost, provide drinking water, and ensure the colonies are up to strength, bearing all losses through disease and death during the hire period, excepting through poison.

II II II

**THE ANTI BACTERIAL** action of honey crops up from time to time and unfortunately, folk lore is so often mixed that it is difficult to sift fiction from fact. Dr. Stanley Coppock, entomologist with the New Mexico State University Extension Service, who is doing research work on the subject, says that, whilst it is still not known why honey stops bacteria, honey undoubtedly has properties similar to penicillin. In the test, honey was tested in agar jelly jars. When the jelly was inoculated with bacteria, the microscopic organisms ran wild and in about 15 hours covered the entire culture. But when little dabs of honey were placed on a piece of filter paper, put on the agar jelly, and then the concoction was inoculated with bacteria, quite a different picture was seen.

Re-examined several days later, bacteria had spread over the plate except in a circle around the honey. The effect is much as would be found if the culture were spotted with penicillin or aureomycin.

Dr. Coppock says it will take considerable analysis to isolate the bacteria-fighting ability of honey.

Some honey was found to be better at killing bacteria than others, and the scientists believe that the anti-bacterial element depends on geographical or flower sources.

**NUOVA ZELANDIA** dominates the stand on a 100-ft. tower above New Zealand's exhibit at the 14th Fiera di Roma, inside which samples of New Zealand produce can be tasted. Honey is well to the fore, and visitors claim that the stand is the sweetest in the whole Fair.

II II II

**WAIMATE COUNCIL** have been concerned at the apparent number of bees which visit the hydatid dosing strip, and as a precaution, asked the National Hydatids Council and the New Zealand Research Unit at Otago University Medical School to ascertain whether there was the possibility of hydatid eggs being transmitted to honey. The director of the Research Unit took English advice on the question, and has now been advised that there is no reasonable basis to suggest that bees can act as passage hosts.

II II II

**UNACCOUNTABLY** losing things is not the prerogative of the New Zealand Railways Department, for it seems that their counterpart in England are equally efficient at making things disappear into thin air for no particular reason.

A life-long collection of honey labels from 800 different suppliers collected by Mr R. A. Lenn of Bideford, Devon, was loaned to the Devon Beekeepers' Association but in the course of transport from Barnstaple Junction—also in the same county of Devon—the collection went astray and has not been seen since. Other shows such as the far-famed Bath and West had to be disappointed. Compensation is poor consolation for a unique collection.

II II II

**FOLLOWING** the "get tough" policy adopted by the Argentine Beekeepers' Federation in refusing to sell honey on the world market at less than economic prices, and banding themselves together to form a marketing organisation, it was decided to ensure sales on the home market by a vigorous and aggressive advertising and publicity policy.

The result is being referred to as "the Argentine Honey Miracle" in that early in 1965 beekeepers had a carry over of 22 million pounds of honey, and the 1965 crop amounted to 70 million pounds. Home consumption at that time accounted only 11 million pounds per annum or a half a pound of honey per head of population. Allowing 43 million pounds for export, the industry was faced with a total carry over of more than 45 million pounds of honey at the end of 1965 which, coupled with the fact that the bottom had fallen out of the overseas market (9 cents a pound f.o.b. Buenos Airies) something drastic had to be done and fast.

Every beekeeper undertook to donate one kilo (2.2 pounds) of honey from each colony, and the directors of the Association went to work touring all the main honey-producing areas to explain the honey promotion project. Tv., radio, magazine and newspapers were bombarded with material, and the slogan "Pongale Miel A Su Vida Gane En Ealud" (Put Honey In Your Life And Increase Your Health) was spread by all possible means, including car stickers, seals on envelopes, posters, showcards, etc., and the Post Office cancelled stamps with the slogan for a month.

Trucks in the industry carried plates 4 feet high and 1 foot wide with the slogan "Pongale Miel A Su Vida Y Sonria" (Put Honey In Your Life And Smile).

A "Honey Week" was organised in Buenos Airies, with Honey Queens from many districts being present and from whom the Argentine Honey Queen was chosen. Millions of little pieces of honey candy were distributed to children during the street processions, and every candy bag carried honey recipes. Talks on honey as a food and the usefulness of bees to man were organised, and to reduce distribution costs, polythene bags were used as containers instead of glass jars.

Co-operation from Federal and State banks gave beekeepers support and enabled them to hold and not sell overseas at uneconomic prices.

In eight months, home consumption increased more than three times, increasing from the low of a half pound per head to one and a half pounds, disposing

of 30 million pounds. Overseas prices, because of the refusal to sell, rose from A$M 29 per kilogram in early 1965 to A$M 47 per kilo in the December of the same year. At the end of 1965 60 million pounds of honey had been exported which, with home consumption of more than 30 million pounds, meant that there was literally no carry over for the next season.

It seem that the "get tough" policy paid a handsome dividend, and the Federation did a darn good job for their (and our) industry.

II II II

**BUZZED OFF WITH THE AGENT'S BEES.** The scene was a darkened house in a small suburban street in Toowoomba. Inside a former crack British Secret Service agent lay asleep.

Outside, a man crouched low on the footpath to escape the light of the full moon as he cut his way through the agent's hedge. It had all the earmarks of a real cloak and dagger intrigue. But the crime the furtive man on the footpath committed came somewhat as an anti-climax. Queensland police are now searching for, of all people, a nomadic bee thief. And the former counter-espionage agent for Britain's M.I.5, Mr Turner, has joined in the hunt.

When Mr Turner awoke the next morning he found that eight of his bee hives had been stolen. Inquiries last week by Mr Turner and the police have revealed that the nomadic bee thief has stolen hundreds of bee hives in Victoria, New South Wales and Queensland in recent years.

Mr Turner, the tough Secret Service agent who worked for M.I.5 in Canada during World War II, took up the quiet hobby of bee breeding in 1923. He points out that the bee thief is no drone. It would be hard, long and risky work to steal a hive housing more than 100,000 angry bees, he said.

He also points out that with a few hundred stolen hives, each bringing in more than £20 a year, the thief's profits would be all honey.

Mr Turner, 70, who lives in retirement with his wife and his bees in Derwak Street, Toowoomba, is taking no more chances. "The thief also stole all my notes on breeding and honey production", he said. "So the few colonies I have left I have shifted to a place I am keeping secret". He has reported the theft to officials of Queensland's £2 million-a-year honey industry. And Toowoomba police have sent a full report on the case of the nomadic bee thief to the Brisbane Criminal Investigation Branch.—From "Sunday Truth", Sydney, N.S.W.

II II II

**TWO CAPE TOWN (South Africa)** beekeepers claim to have produced and patented a new development in apiary practice by manufacturing the first successful machine-made comb. The cells are not full depth, but deep enough to hold nectar.

The Ellis and Marshall Quick Comb is made of pure bees wax, with approximately half depth cells on both sides. Thus the bees are left with sufficient comb building operations not to interfere with the normal wax-making activities of the colony, but at the same time, saving a large amount of honey which would otherwise be used in comb construction. It is claimed that nectar has been found to be stored within two hours of the insertion of Quick Comb into the hive. In comparative experiments, Quick Comb has been filled and sealed over whilst the bees have made very little progress with ordinary foundation.

In the brood chamber, the queen is claimed to use Quick Comb almost immediately, and queens have been reared using the new comb in both normal and observation hives. No colony has rejected the manufactured article.

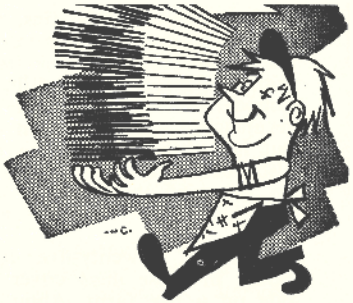
The claim is made that Quick Comb will eventually supercede foundation; that it does not warp or collapse; that the finished combs are smooth and even, making uncapping an easier operation at extracting time, and that the extractor can be run at higher speeds.

Quick Comb is made up in sections, four of which go into a shallow frame and eight into a deep frame (Langstroth) but production can be made to the full measure. Support is given by wires embedded in the normal way, using a 10-volt transformer.

Size of cell has been made for the South African indigenous bee, but can be readily varied to suit any strain.

It will be interesting to hear more of this new development in apiary management.

# BRANCH NOTES



## WAIKATO

**"WAIKATO'S 60 YEARS"** .... .... .... ....

The 60th annual meeting of the Waikato branch of the National Beekeepers' Association was held in Hamilton on May 10—60 years since the formation of the branch, a truly commendable period of service to beekeepers.

There are only two person left who were in attendance at the inaugural meeting of the branch—Mr E. Sage of Ohaupo and myself.

My father, G. S. Pearson, of Hamilton, was one of the large hive holders of that time (150 stocks in three yards) which coupled with the service he gave in getting the meeting launched, undoubtedly influenced his being elected first President.

A list of certain South Auckland beekeepers at that date with reasonable hive holding may be of interest.

Pastor Clark, Te Awamutu.
Mr Bartlett Miller, Te Awamutu.
Carl Brothers, Ohaupo.
Mr and Mrs Wood and assistant, E. Sage, Ohaupo.
Mr Cottrell, Te Aroha.
Mr Hooper Teed, Te Aroha.
Mr C. Hutchinson, New Stead.
Mr H. H. Shaw, River Lea, Hamilton.
Mr John Hobbs, Tauwhare.
Mr Hobbs, Snr., Hamilton.
Mr G. S. Pearson and assistant, Hamilton.
T. Pearson, Hamilton.
Mr I. Hopkins, of Auckland, self-elected organiser for the advancement of the beekeeping industry of N.Z.
Mr Kirk, head of Agricultural Dept., Wellington, and later head of the Apicultural industry.

At this period beekeepers were rather amateur in scope because of limited knowledge in manipualtion of bees to obtain high honey production, by being confined to horse transport, and the undeveloped nature of the potential honey market.

Little if anything was done to improve honey to the consumer, the procedure then advocated by "authorities" was, that to reduce the excess water content of fresh extracted honey it must be exposed as much as possible to the air. This was effected by holding it for a considerable period in wide open tanks and one such tank I owned was 3ft deep x 6ft square. In filling 2lb. tins we placed the first row of filled tins in the case without lids, the top layer we placed with lids loosely closed, and the honey left until granulated.

Horse transport was slow, confined, and very tricky indeed. A horse with its odour is a good target for bees at any time and a sweating horse an abomination. Adventures aplenty, yes, in the good old days!

A common method of increase was by saving all swarms. Little was known of good queen rearing till about 1908 when the cell grafting method was made known. This innovation, the Association of beekeepers, disease control, motor transport, and the advent of organised marketing, are the major cause of increases in beekeepers, hive numbers, and quantity of honey produced.

A leading and ever debatable problem (governed by horse transport, of course) was which was most convenient and economical—to build a shed at each out-apiary, or cart the honey for extraction to one central building. Pine timber had just come into use at 8/- to 12/- 100 super ft., while o.b. rimu about 18/-. In 1912 Pearson Bros. had as many as six honey sheds, pine timber etc.

Honey prices: 2lb. tins, best quality, 12/- per doz. wholesale, 4d at the door. Local folk sent their children with a large basin for 1lb. only. One pound looks very small in such a receptacle, so Mother in some cases put in a bit extra on this account and also because of little fingers that lapped up some of the contents on the way home!

Contrast? Twenty-five to 40 miles would in those days cover a boundary ride on a bee farm. About three years ago I decided to test out the honey potential of the Urewera National Park, some 455,600 acres (practically all native bush). By favour of the Commissioner of Crown Lands, Mr Beachman, of Hamilton and his Board, I was allowed to place a limited number of hives in the Park. In all I put 20 there, in three localities on the east border of Lake Waikaremoana.

The lake is approximately 270 miles from my home, Auckland, the last 60 miles being narrow (good surface) continuous winding road used fairly continuously by timber log vehicles, trade trucks, and private cars. This road passes over four ranges of hills from 2000 to 3000 feet in height with many steep grades and sharp bends. For safety sake one is forced to travel mostly at 20 miles an hour, thus one return trip demands six hours of absolutely alert driving.

On November 30, 18 months ago (alone) I started on my boundary ride, this with car and loaded trailer. I got up at two in the morning and during the 10 minutes or so with torch in hand adjusting car and trailer on the side of the road in front of my house, a traffic officer drove up and down (seemingly eyeing me) passing three times before I started off; (one up for police protection in Auckland). I did the run to the bees at the lake; spent 3-4 hours supering hives and returned home at nine p.m. that night, thus with 14 hours at the driving wheel. A run of about 500 miles; possibly 10 days with horse transport!

The Beekeepers' Association have put up a good record of continuous service in the interests of beekeeping which brings satisfaction to a foundation member who realises too that after 60 years of functioning, the formation of the Waikato branch was not in vain.

—Compiled by T. H. Pearson.

## WAIKATO

At the recent branch meeting a report was given on the observations of passion vine hopper through the past season, and that weather conditions could cause them to be more interested in certain host plants. A good foundation has been formed for this season's observations.

On July 9th, fire destroyed "Bates Apiaries" honey house. The fire started at 9 p.m., cause unknown, destroying 500 boxes of combs, all queen breeding equipment and the extracting plant.

Fortunately a new truck parked in the building was removed without damage and a lot of new gear at one end of the building was saved by the fire brigade, who pumped 60,000 gallons to quench the blaze.

A new building should be ready for queen raising to start on time.

The latter part of July has had some warm days, and bees are breeding freely. All we want is for it to continue so that bees can work early spring sources, for a change.

—Reported by Cliff Bird.

## CANTERBURY

At our branch meeting, our delegate Mr Ron Newton, gave a comprehensive report of Conference at Whangarei. The Apiary Instructor, Mr Griffin, read an address given in Victoria by Mr Keith Doull of the Wait Institute on the subject "Queen Bee Substance". It is hoped that this address can be made available to all branches to stimulate thought on swarm control and queen rearing.

On the result of Remit 15 regarding the importation of new breeding stock, considerable interest was shown in the suggestion that a queen breeding programme be undertaken by a qualified person financied by individual beekeepers.

It has been recognised for some years that a scientific approach to breeding of queens is necessary if we

are to improve our stock much further. Beekeepers and queen rearers are too busy to do the really essential work in developing and fixing strains. We can go so far with our methods of selection and raising queens and while we are reasonably satisfied with the results there is still the thought that we can do better.

Our branch is interested in a scheme but realises that the cost of running it may have to be on a national basis costing perhaps £3000-£4000 annually with little or no results for a year or two. Could our Association run it or would it be better for a few genuinely interested producers to do the job?

Canterbury would favour comments from other branches or individuals and our secretary would be willing to handle any correspondence relating to it.

A topic discussed was the desirability of holding a one-day symposium during next Conference in Christchurch. The Whangarei Conference lasted two days and with the prospect of a spare day next year we feel that the time could be profitably spent in the form of a symposium run in conjunction with the Apiary Section, similar to the one held in Timaru last June.

After a mild autumn and dry early winter, snow, rain and cold temperatures is the order of the day. At least queens won't start laying too early now-

—Reported by Jasper Bray.

### NORTHLAND

July 1966 will go down in branch history as the occasion of the first National Beekeepers' Conference in Whangarei.

It was an eye-opener to members attending to have such an experience. Lectures with slides were appreciated and more reports from Canada are anticipated with keen interest.

It was a pleasure to have the Conference here, and we hope visitors enjoyed their stay in Whangarei.

—Reported by A. G. Tucker.

### HAWKES BAY

At our last meeing Mr Ian Berry was elected Branch President, with Mr R. Morse as Secretary.

The district of Hawkes Bay is planning an Agricultural Museum, and if any beekeeper can assist by the provision of early records, documents or photographs of pioneer beekeeping, they would be gratefully received at P.O. Box 86, Havelock North.

—Reported by Mrs Gwen Dorward.

### SOUTH CANTERBURY

The second **Beekeeping Symposium** was held in Timaru on June 29 when more than 150 beekeepers attended from North Canterbury to Southland.

Mr H. Cloake, Past President of the National Beekeepers' Association opened the meeting, arranged by Mr V. A. Cook, Apiary Instructor of Oamaru, and Mr R. Davidson, Secretary of the branch.

During the symposium Mr V. A. Cook gave an illustrated address on the honeybee colony and Mr J. Maindonald, a Christchurch consulting engineer, spoke on the insulation of honey houses.

Mr I. W. Forster, Apiary Technical Officer with the Department of Agriculture, Oamaru, illustrated his address on the pollination of red clover.

During the evening session speakers who had recently returned from the beekeepers' tour of Australia gave impressions of Australian methods.

Mr R. Davidson (Jnr.) Timaru, spoke on Queen Raising: Mr A. Gosset, Leeston, on Bee Breeding; Mr R. Davidson (Snr.) Timaru, on Honey Marketing; Mr F. A. Bartrum, Pleasant Point, Beekeeping Machinery and Mr and Mrs A. H. Simpson, of Geraldine, showed slides of the scenic aspects of the tour.

—Reported by J. G. McKenzie.

## APPEAL TO BRANCH SECS.:

**Everyone likes to know how the other half lives and reports from Branches throughout the country are essential for the dissemination of news and activities. A reminder card is always sent out so that "I forgot" is a lame excuse. Depute the job to a willing member as PRESS SECRETARY—it sounds good—but please see that your Branch is listed in the next issue.**

# NBA EXECUTIVE MEETS
## BEFORE AND AFTER CONFERENCE

A day-long meeting of the National Executive took place at Whangarei preceeding opening of Conference to finalise business arrangements and to hold informal meetings with Departmental officers.

Consideration was given to the President's forthcoming report, the Financial Statement and the Auditor's Report and to preliminary information concerning the Nectar Sources Bulletin prepared by Mr Walsh, of Auckland.

On the question of Disaster Area Relief, the exact definition of the factors constituting a calamity is a matter for conjecture and will have to be defined by test case action by an apiarist when circumstances in his area give the right to make a claim.

An interesting point which arose from discussion was the fact that in the event of loss of hives through flooding, it must be established that the siting of the apiary is in a district not prone to flooding. If it is known that geographical factors make flooding likely or even possible, it is considered that the beekeeper knew of, and took, a calculated risk in placing his hives in such a position. In any event, no claim can succeed under the Earthquake and War Damage Act unless the apiarist is insured for fire risk, in which case a percentage of the premium is allocated to cover such contingencies.

In considering Mr Pearson's report of activities on the Agricultural Chemicasl Board, the President expressed gratification that Mr Pearson had been re-appointed to the Board for a further period of three years as from April 1.

A recording had been received from the bursar of his activities in Canada and appreciation expressed for the extraordinary hospitality of Canadian beekeepers. The tape was to be transcribed at Conference for all delegates to hear this first hand report. (Note: Unfortunately, due to the size of the Town Hall and poor acoustics, coupled with technical problems with the borrowed transcriber, the tape recording had to be abandoned through inaudibility. A condensed report will be published of activities up-to-date in the next issue).

Mr Eric Smaellie, Superintendent Beekeeping, Department of Agriculture, together with Mr Trevor Palmer-Jones, Scientific Officer, Wallaceville, attended by invitation during the afternoon, when the opportunity was taken to seek their reaction to the possibility of the importation of bees in immature stages for experimental purposes and possible improvement of blood lines. It was encouraging and pleasing to learn that official reaction would be to permit importation, provided that adequate safeguards were taken to ensure the exclusion of mites by examination at Wallaceville and that the industry themselves set up their own organisation for queen raising and controlled breeding on a co-operative basis.

The Department could not, however, undertake the additional work involved as part of their normal duties because of other commitments and inability to provide the trained staff.

By unanimous decision, the Executive decided to recommend the honour of Life Member on Mr James Barber for his meritorious service to the industry.

### NEWLY ELECTED EXECUTIVE

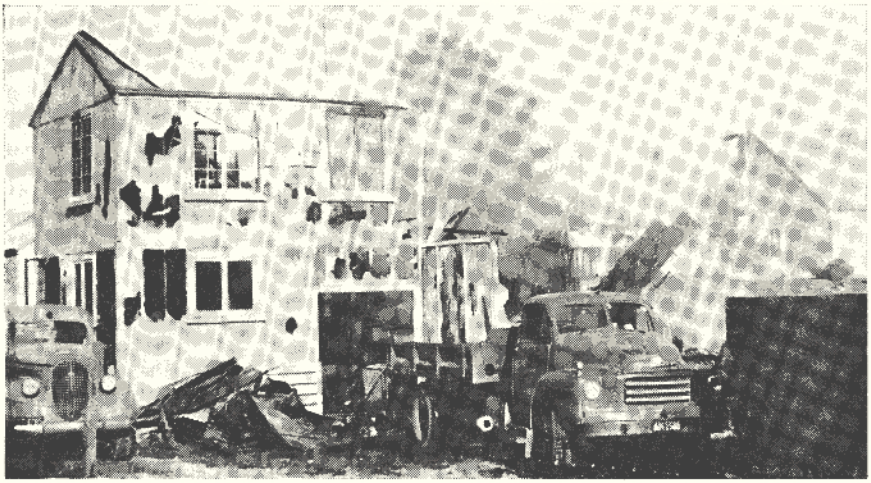
At the conclusion of Conference, the newly elected Executive, comprising Messrs Don Barrow and Terry Gavin (North Island) and Jack Glynn and Ralph Glasson (South Island) met under the chairmanship of the President, Mr Trevor Wheeler, with the General Secretary, Mr K. Moody, and the Editor, Mr L. W. Goss in attendance by invitation.

cluded a decision to hold a meeting of the Executive in Wellington in October next, and to implement a Conference remit by endeavouring to provide a price guide for beekeepers. Packers and distributors will be invited to assist with information on current prices for this project to enable publication to be made in the November issue of this Journal. A letter would be sent to the Minister in respect of Remit 8 on overdraft facilities for the industry, and that the Professor of Massey University be contacted with a view to a student taking for his thesis a study of marketing of New Zealand honey, with a view to recommending possible improvements, in accordance with Remit 9. First step in the implementation of Remit 13 would be to contact Mr Vince Cook of Oamaru, who had studied extensively by correspondence for his Dip. Apic. examinations.

Arrangements would be made to distribute the Bulletin on Nectar Sources to branches as soon as possible, and representations made to the appropriate authority to exempt beekeeper's staff from military service during the months of September to March inclusive.

**CONFERENCE AT CHRISTCHURCH** was fixed for the period July 12-14, 1967.

# *FIRE DESTROYS APIARY*



Pictured here are the still smouldering ruins of the fire-ravaged apiary of the Penroses, at Leeston, Canterbury.

Awakened in the early hours of June 2, David Penrose found that plant and stock was well ablaze, and little could be done to save valuable stocks and machinery from destruction.

A new automatic packing machine costing over £1,000 had been installed immediately previous to the fire, which also destroyed 22 tons of bulk honey, storage tanks and equipment.

The business was founded and developed over the passed 30 years by Mr T. Penrose and in recent years has been managed by his son David.

A new building and plant will rise from the ashes, although replacement of some specialised machinery will not be easy, with present import restrictions.

# NBA MEMBERS VISIT AUSTRALIAN APIARIES

**You never know how successful a project will be until you try. The organiser of the Association members' trip to Australia to see how the other half lives had more than butterflies at some stages as to the success likely of the venture, but reports now prove that George Winslade, of Oamaru, did his work thoroughly and well, and that members profited considerably from their fact-finding experience.**

**FORTY-THREE** people from all over New Zealand, some of the beekeepers accompanied by their wives, left Christchurch, Wellington and Auckland to converge on Sydney, the starting point of the "Beekeepers' Special".

In a journey of 3000 miles by air and 2000 miles by luxury coach, our confreres quickly learned that there is little comparison between beekeeping in New Zealand and across the Tasman. One Australian apiarist, for example, has colonies sited 1400 miles apart—something akin to keeping bees in Wellington, the Bluff and Whangarei. Another man travels about 50,000 miles a year, necessitating a new truck every three years, and a third man quizzed on his activities explained that he has 1600 hives and shifts them four times a year! The examples quoted may not be the general run of practice, but it gives a pretty fair indication that New Zealand is not the only country where beekeepers earn their living by solid work.

Another hard and fast impression on the party was the overwhelming hospitality and welcome received from their hosts in all parts of Australia, and the requests made by Press and radio for personal interviews to obtain expressions of opinion on Kiwi operations.

First visit was to Mudgee, Orange and Bathurst. At Mudgee, centre of interest was at the apiary of Stan Bennett, who has a family business engaged in packing operations for which one order alone consists of 1200 tons of honey a year. Loyal beekeepers from surrounding districts also turned out to increase the welcome, and a newly-developed forklift powered by a small petrol engine was put on show for the first time.

At Orange, the honey house of Murray Chalton contains two automatic extractors of 72 frames, and a Fox Harrison uncapping machine capable of extracting 7 tons of honey per day. The barrow used for the 44-gallon drums is in widespread use throughout the country.

Harold Peck, President of the N.S.W. Association lives at Orange, and arranged a very pleasant film evening to show the party screenings of typical Australian apiaries. Two members of the visiting Kiwis, Messrs Glasson and Tuck reciprocated with films of New Zealand beekeeping conditions.

At Alf Latham's yard at Bathurst we saw Caucasians at work, and it is Alf's avowed opinion that Caucasians are the best strain obtainable. Each visitor was presented with a bottle of yellow box honey—a premium Australian pack—and the next stop was at Edgell's processing factory before returning to Sydney.

A queen breeding programme was in progress at Hawkesbury College, and this highlight of the trip will form a separate report at a later date.

The three-day attendance at the N.S.W. Conference was instructive, and it is hoped that our hosts were able to profit from the panel of New Zealand beekeepers in the persons of D. Holland, R. Davidson Snr., Jack Glynn and N. Tuck with George Winslade as chairman of the "Brains Trust". All aspects of beekeeping were covered in question and answer form, and was certainly enjoyed by the participants.

Local beekeepers were waiting our

arrival at the hotel in Brisbane, and the first outdoor visit was to the plant of Ken Ollie, where a piece of equipment of particular interest deserves special mention. Ken has a hydraulic boom loader built to his own specifications which is much faster than any loader known over here, capable of loading an 8-ton truck in one hour and off-loading in only 20 minutes! This is certainly fast work in anyone's calculations.

Another piece of equipment seen at the same apiary, and which is completely efficient is for the eradication of mice. Fortunately, or maybe unfortunately—we shall never see a similar house trap here, for the trap is in the simple form of two 8ft carpet snakes which make efficient and very short work of any foolish four-footed intruders. Maybe some of the boys would not have been so keen and anxious to go poking around on self organised look-see expeditions had they known of the snakes whereabouts!

Gatton College was well worth the visit, and it is part of the curriculum that every boy must complete a short course in beekeeping as part of their education. Gatton College is an agricultural centre, and it certainly assists the farmer-beekeeping relationship to know intimately each other's working problems. A certain amount of queen rearing is also carried out at the college.

Jovial John Guilfoyle put on a barbeque evening at his home whilst we were in Brisbane, and very enjoyable it was too. At a honey grading contest organised for our entertainment, it is regretted to report that the visiting contingent failed miserably.

John's equipment factory was an eye-opener to most of us as to how things should be made and the shortest routes to efficient production.

At Capilano Apiaries, the next port of call, 10 tons of honey are packed each day with a permanent staff of one and the rest casuals!

Our visit co-incided with a two-day Conference in Brisbane, where the New Zealand contingent again provided a panel for the "Brains Trust", strengthened by the inclusion of T. Vickers.

Conferences in Australia—at least those that we attended—seem to be conducted on rather a different basis to our own, and do not have a pre-arranged agenda of remits from branches. It is suggested, with respect, that our own Conference arrangements are preferable.

No excuse was necessary to include Surfer's Paradise on the itinerary, and en route we stopped at the Rosser apiary at Kingston. Here again was seen a superior piece of equipment in the form of a boom loader which had two short booms, one on each side of the truck. This obviates the necessity of having the truck on a perfectly level surface during loading, and the whole consignment was wound to the back of the truck in one operation, permitting two men to load at one time.

Surfer's Paradise itself was a pleasure trip, where we relaxed with visits to the Porpoise Pool, Bird Sanctuary, the Bowling Alley, and the more intrepid exhibited their skill at water ski-ing and swimming. Some of us just lazed and rested.

Having re-charged our batteries, the next visit was to Kempsey, where we saw the biggest extractor imaginable in the course of construction. Just think! One and a quarter tons extracted in one operation! Few of us would have been game to stay in the same room during the machine's operation!

Off to Maitland to visit the factory of Pender Bros., where a great deal of beekeeping equipment used in New Zealand is made. Here we saw machines capable of producing 30,000 frames a day and supers made in one operation. Stainless steel extractors, which completely eliminate any rust or corrosion problems were of great interest. These machines are automatically self centring and simply have to be loaded and switched on. The extratcor switches itself off on a time relay, restarts in reverse, and completes the operation. Naturally, we all decided that we would like to acquire this particular piece of machinery to assist production.

From Maitland, some of the party returned to Sydney en route for the

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## CHRISTMAS CARDS

## for BEEKEEPERS

Pictured here is one of the magnificent designs printed and prepared by the Bee Research Association, whose head office is at Hill House, Chalfont St. Peter, Buckinghamshire, England, and whose work for and in the interests of beekeepers is internationally famous.

The black and white reproduction does not in any way enable the reader to visualise the delightful pink and yellow of the dog rose, or of the worker with her baskets laden with pollen.

New Zealand beekeepers requiring these specially designed cards should send to the Hon. Publications Secretary, 11 Poplar Grove, Maidstone, Kent, England, from whom a number of varied and pleasing designs can be obtained. Unfortunately, times does not permit ascertaining the precise cost of each card, but a remittance of £1 in Commonwealth 5/- postal orders will bring forth a good supply of distinctive cards, each of which carries a simple and straightforward message of greeting inside. They are very well worth buying.

**Mr E. Smaellie, Superintendent, Beekeeping at the Department of Agriculture, Wellington, spoke about**

# THE APIARIES ACT 1965

**when he addressed Conference at Whangarei**

We are meeting in the area where beekeeping in New Zealand had its beginnings.

Previous to 1838, no variety of hive bee existed in New Zealand; consequently very early settlers were unable to avail themselves of the abundance of nectar available from native flora.

The first hive bees were brought to New Zealand from England in March 1839 and were landed at Mangaranga, Hokianga. These were two colonies, in straw skeps, brought in the sailing ship "James" by Miss Bumby, sister of the Reverend J. H. Bumby, one of a party of missionaries. Later shipments were successfully introduced in 1840 and in 1842.

Further shipments of bees from Australia and America, combined with the natural swarming tendency of the bees under uncontrolled conditions, soon furnished a large bee population throughout New Zealand.

Through the activities of these early settlers, and, later of such men as Isaac Hopkins who was the first Government Apiarist, a sound beekeeping industry has been developed, which today is as modern and efficient as anywhere overseas.

## Statistics:

Commercial honey production is a growing industry. For the period ending 31st May 1965, 4,613 beekeepers owned 13,345 registered apiaries and 194,589 hives. Statistics indicate a further decline in domestic beekeepers, and an increase both in the number of commercial beekeepers and their hivs.

Prsent holdings are distributed as follows:

North Island—3,468 beekeepers, 7,039 apiaries and 112,967 hives.
South Island—1,145 beekeepers, 6,306 apiaries and 81,622 hives.

Comparison with ten years ago shows in the "250 hives and over" commercial group that in the North Island there has been no significant change in the number of beekeepers, but a decrease of 14 per cent in the number of hives In the South Island, beekeepers increased by 18 per cent and hives by 32 per cent. The reduced number of hives in the North Island is mainly due to the removal of apiaries from dark honey areas and the consolidation of commercial units in districts where better grades of honey are produced.

Despite the increased total numbers of hives, average total annual yield of honey is approximately the same as ten years ago. This suggests that production per hive unit has not increased—despite better management practices—and some beekeepers' returns on capital invested for bigger outfits is much less than it should be. Beekeepers must aim to produce more honey per hive, rather than operate larger hive holdings.

## Production:

Last season's production was approximately 5,580 tons of honey and 204,645 lbs of beeswax, approximately 500 tons more honey than the previous six season's average.

In Canterbury, South Canterbury and Central Otago, crops were above average and the best for several years. Average crops were produced in most

North Island districts, but were disappointing in Taranaki and Manawatu. Yields in Wes tCoast, Nelson and Marlborough were below average an din Southland the overall crop was much below average.

**Inspection:**

Inspection of apiaries continued with assistance from competent beekeepers acting as part-time inspectors. Reports indicate that the overall incidence of disease is low but in some districts is relatively widespread.

The number of hives inspected last season by inspectors was 41,866 and 265 diseased hives were destroyed by burning. The overall incidence of diseased apiaries and hives inspected was 3.37 per cent and 0.88 per cent respectively. Bees robbing colonies established in hollow trees and buildings, and some beekeeper's utilisation of contaminated hive equipment appear to be major causes for the disease found.

*Bacillus larvae* is the most serious disease of bees in New Zealand. The Apiaries Act, 1927, requires beekeepers to take certain action when this disease is found in their apiaries. It also gives apiary instructors legal powers for the eradication or control of this disease.

In the last few years both the Department and the National Beekeepers' Association have been concerned as to whether existing methods of detection and control of the disease were adequate. Joint meetings of departmental officers and the Executive of your Association were held, and implementation of the recommendations is now possible by the enactment of the Apiaries Amendment Act, 1965. It is expected that the new provisions in this Amendment Act will be instrumental in reducing the present incidence of *Bacillus larvae* disease and bring it under control.

The Apiaries Amendment Act, 1965, contains three clauses .

Clause 2 requires a beekeeper to notify an inspector forthwith if he finds disease in any hive, and requires the beekeeper, within seven days after becoming aware of the presence of disease, to take proper steps to prevent its spread. This Clause also requires a beekeeper to make an inspection of all his hives and not later than December 7 each year to send to an Inspector a statement, verified by the statutory declaration of the beekeeper, setting forth the date or dates on which the inspection was made: the location of the hives inspected and the number of hives (if any) in which disease was found in the course or the inspection.

Clause 3 gives more adequate powers for the destruction of bees, honey and appliances that are diseased or infected, or that are in the opinion of an inspector likely to be, or become diseased or infected. Speedy destruction of hives is frequently necessary to prevent the spread of disease, and an inspector is now empowered to take any necessary action in this connection, either with the consent of the beekeeper or the occupier of the apiary, land or premises, or with the concurrence of another inspector.

These measures will be implemented by the following procedures. Beekeepers will be required to undertake at least one thorough inspection of each of his apiaries during the spring months and to complete an inspection statement showing the dates the inspections were made, the locations of the hives, and the number in which disease was found in the course of the inspection. The statement forms will be supplied to beekeepers by the Department. Each inspection statement will require to be verified by statutory declaration of the beekeeper and returned to the Apiary Inspector not later than December 7 each year.

At any time when disease is found the beekeeper is also required within seven days to notify, in writing, the Apiary Inspector for the District. This action should become standard practice. On notification the Apiary Inspector will inspect the apiary concerned, or arrange for its inspection by a part-time inspector. The Inspector will also advise beekeepers in the immediate vicinity that disease has been found and inform them that a check inspection will be made of their near-by apiaries as soon as possible.

When no disease is found the beekeeper will be free to harvest his honey crop, but if disease is found, removal of the crop will not be permitted until the apiary has been re-inspected and all hives are then found free of disease.

The following general principles will be adopted:—

The current policy of burning every hive in which disease is found either by the beekeeper or inspectors will be continued.

If the beekeeper himself finds diseased hives, he should immediately burn them and also notify the Inspector forthwith. If the equipment is in nearly new condition, the beekeeper, upon request, may be authorised by the Inspector to save such equipment, provided it is sterilised to the satisfaction of the Inspector by methods as he may approve.

In an apiary in which 75 or more per cent of the hives are diseased, then all hives in the apiary may be regarded as being diseased and will be destroyed. If, however, the apiary contains over forty hives and 75 per cent or more of the hives are diseased, the decision on whether total destruction of all hives should be carried out will be at the discretion of the Inspector.

Unless the beekeeper is present and consents to the destruction of all hives in apiaries where such incidence of diseased hives exists, a confirming opinion of another Inspector will be obtained before the hives are burnt. In all cases where hives are burnt by the Inspector, the beekeeper will be advised of the action taken.

Apiary inspection by departmental officers during the spring and early summer period will take precedence over all other work except in specially approved circumstances.

The employment of qualified beekeepers as part-time inspectors to assist Apiary Inspectors will be continued. It is to be understood, however, that inspections done by the District Apiary Inspector or part-time Inspectors are to be regarded as check inspections only. Part-time Inspectors may also be employed to undertake check inspections of commercial apiaries. A complete inspection of at least one apiary of each commercial beekeeper in a district will be carried out either by the District Inspector, a part-time Inspector or by both working jointly.

Whenever it is practical, Inspectors will endeavour to advise a beekeeper when he intends to carry out the inspection of his apiary; the plan of inspection, however, will not be unduly delayed because the owner-beekeeper cannot be contacted ,or is unable to be present when the apiary has to be inspected. Advice cards will be carried by Inspectors and left in a conspicuous place in the apiary when it is considered appropriate to do so.

Control of the movement of hives and equipment is necessary if the spread of disease is to be controlled, and Section 7 of the Apiaries Act will be strictly enforced. Beekeepers are required to notify the Inspector wherever there is a change of ownership. In future all hives will be inspected by the inspector before removal to a new location is authorised by issue of a permit. Removal of hives from apiaries in which disease was found during the previous 12 months will not be authorised until the Inspector has inspected all the hives.

When diseased hives are found, they will be destroyed. The remaining hives in the apiary must then remain there for six weeks when they will again be inspected. If found to be free of disease, a permit for their removal may then be issued.

Where diseased hives or equipment are located in a Declared Fire District and require to be burnt during the fire restriction period ,the Inspector may at his discretion authorise removal of the infected hives and equipment to the home apiary or other location to be sterilised or destroyed under such conditions as he may specify.

Provided the apiary is free of disease the beekeeper is free to move bees, honey and hive equipment between his own registered apiary sites without first obtaining a permit, but will be required to obtain a permit when disease is present, and also to establish a new apiary.

An annual blanket permit may be issued to breeders of queens authorising the sale of queen bees subject to the following conditions:—

(a) That the cages in which the queens are delivered be new.
(b) The candy in the cages is made entirely of sugar and *NOT honey*.
(c) That such a permit is subject to cancellation at any time should circumstances so require.

The sale of and or any removal of packaged bees and nuclei will be subject to the issue of a separate permit for each transaction.

Every effort will be made to ensure that every beekeeper is able to recognise *Bacillus larvae* disease and is competent to undertake the measures necessary for its control and eradication. This will be done by feature articles in beekeeper's and farmer's publications, educational leaflets enclosed in correspondence, and by way of personal and group instruction to beekeepers.

All these measures will be implemented by the Department forthwith.

# VISIT TO AUSTRALIAN APIARIES

(from page 33)

land of the long white cloud, whilst the remainder flew to Canberra to have a glimpse of the Federal Capital.

For all of us, here was the end of the road after our enjoyable and instructive visit to the Great Continent.

George Winslade had spent six months organising and arranging the trip, and there was not one among the party who thought other than that he had completed a job, and a job well done. In most voluntary and unpaid jobs preparing arrangements for the benefit of others there are generally more kicks than h'appence. In this particular case George gained no h'appence but he gained no kicks. Everything went well and one and all were grateful for his work, forethought and organisation. It was money well spent, and if we returned to our wives a little the poorer, we were all the wiser. The bees will have to work a little harder this year to make up for it, and with the knowledge we have gained, the cost involved will soon be replaced.

George Winslade, organiser of the tour, has some photographs available at 6/6 each, and prints can be obtained from George direct at Box 1.H., R.D., Oamaru.

## BUY

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**Cash for up to 400 hives.**

**Condition immaterial. Open to share or wage proposal to clear vendor's affairs. Genuine replies please, with particulars and price in first instance to**

**"STARTING", c/o "N.Z. BEEKEEPER", Box 3561, Auckland.**

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Seeks Employment Offering Prospects. Capable of Managing, and having Finance.

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**C/o N.Z. Beekeeper**

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Aged 26, Keen to learn New Zealand methods of production, and to work hard for a contracted minimum period of two years in return for a decent wage and housing for self, wife and two young sons, intending to emigrate early in 1967, then please write to:

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**1 8-Frame Extractor, £45.**
**1 Small hot-top cappings Reducer.**
**2 ½-Ton Round Honey Tanks.**
**1 Honey Heater, as new, £40.**
**1 Honey Pump, complete with Sump, Float Switch, and elec. motor.**

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**Satisfaction guaranteed.**

**Mail your order now to:**

**S. DARBY**
**8 Tobin Street, Pukekohe, Auckland**

**3-JET OIL-BURNING SPEEDWAY BOILER**

Complete with Fuel Tank, Flue, Automatic Water Feed Unit.

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**"SOUTH ISLAND",**
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**YOUNG MAN**
**YOUNG MAN**

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**SINGLE MAN OR YOUTH**
**SINGLE MAN OR YOUTH**

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

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| Up to | £ | s. | d. | Up to | £ | s. | d. |
|---|---|---|---|---|---|---|---|
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| | minimum | | | 360 colonies | 3 | 0 | 0 |
| 90 colonies | | 15 | 0 | 390 colonies | 3 | 5 | 0 |
| 120 colonies | 1 | 0 | 0 | 420 colonies | 3 | 10 | 0 |
| 150 colonies | 1 | 5 | 0 | 450 colonies | 3 | 15 | 0 |
| 180 colonies | 1 | 10 | 0 | 480 colonies | 4 | 0 | 0 |
| 210 colonies | 1 | 15 | 0 | 510 colonies | 4 | 5 | 0 |
| 240 colonies | 2 | 0 | 0 | 540 colonies | 4 | 10 | 0 |
| 270 colonies | 2 | 5 | 0 | 570 colonies | 4 | 15 | 0 |
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All financial members of the Association are automatically indemnified against Public Risk claims up to £5000 in any occurrence of injury or death to persons or livestock directly attributable to the action of the members' bees and arising from his or her negligence as the beekeeper. The cover is underwritten by the New Zealand Insurance Company Ltd. and the premium met by the Association from consolidated funds.

## THE N.Z. BEEKEEPER

This Journal is issued free to all beekeepers in New Zealand having 30 or more registered hives, and to others who are members of the National Beekeepers' Association.

Literary contributions and advertisements must be in the hands of the Editor, Mr. L. W. Goss, P.O. Box 3561, Auckland, not later than the 25th of the month preceeding 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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*Front Page Story*

# Bees are Such gentle Creatures

PICTURED here is the steady hand of Scottish apiarist Charles L. Bruce, of Cockenzie, East Lothian, Scotland, active in Scottish beekeeping for over 30 years.

The photograph was taken by Dr William Sinclair, of "Caeredin" Comins Coch, Aberystwyth, Wales, and was the second prize winning entry in a photographic competition organised by the Scottish Beekeepers' Association.

Dr Sinclair is a hobbyist beekeeper who keeps a few hives on farmland not yet been denuded of flowering weeds, and the fields and multitudes of hedges provide a delectable blend of nectars from dandelion, hawthorn, white clover, black berry, some sycamores and an abundance of fire weed (**Epilobium**).

As a biologist, Dr Sinclair has long been interested in bee behaviour and colony construction and in von Frith's and Lindauer's work on bee communication, using bees of no distinguished ancestry, but of French origin and black in colour. This strain, says Dr Sinclair, work very well when "local" bees in nearby hives have not ventured outside their hive. Hives with "local" inmates are to be re-queened with the French origin blacks.

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