The New Zealand BeeKeeper

Summer 1984

The New Zealand BeeKeeper

OFFICIAL PUBLICATION OF THE NATIONAL BEEKEEPERS' ASSOCIATION OF NEW ZEALAND INCORPORATED

CIRCULATION 1,450
To Members of The National Beekeepers' Association of NZ Inc who own more than 50 hives each and so are legally subject to the annual hive levy. THESE HIVE LEVY PAYERS OWN APPROXIMATELY 87% OF ALL BEEHIVES IN NEW ZEALAND.
To Beekeepers with less than 50 hives who subscribe to the journal at $15.00 a year which also includes membership of the National Beekeepers' Association of NZ Inc.

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FOOTROT FLATS

by MURRAY BALL

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Ian Berry, P.O. Box 16, Havelock North. Phone 775-400 and 777-300 (business) and 778-772 (home).

Vice-President:
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Executive:
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Gavin White, Hamama Road, Takaka, R.D. 1.

Tony Lorimer, 353 Cobham Drive, Hillcrest, Hamilton. Phone 69-625 or 66-123. A/hrs 63-002.

Dudley Ward, Kintail Honey Ltd, 97 Guy Street, Dannevirke. Phone DV-8301.

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Steuart Goodman, Dalmuir House, The Terrace, P.O. Box 4048, Wellington. Phone 728-102.

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THE MARCH OF TIME

An old adage says time passes faster as you grow older. For those of us alive today, far more fact than illusion. In days of yore change arrived much more slowly. It took as long to travel from Rome to London in Napoleon's day as in that of Julius Caesar. The Brown Bess musket, first issued to the British Army around the year 1670 remained the main infantry weapon until 1840. Medical knowledge in early nineteenth century Europe compared poorly with that of the Egyptians.

The break-through—for better or worse—came with the advent of steam. From then on the tempo of life, and the variety and complexity of science, steadily and inexorably increased to the point where change became almost frightening. During the lifetime of many of us the horse disappeared as a beast of burden, many diseases were eradicated by wonder drugs, and the silicone chip not only makes the impossible possible but boringly mundane.

Why beekeepers must stay with the play to survive as viable businessmen. The days of "by "guess and by God" and "plenty of flowers in the hedgerow" are gone. Today, beekeeping is not only a science but an exact science. Why your Association pays so much time and attention to the future.

Industry planning is now a must. The SWOT plan is essential if the industry is not only to survive but to progress. Vice President Allen McCaw, his finger firmly on the pulse of SWOT development, is collating information into a series of action plans for publication in The New Zealand Beekeeper. Hand in hand with SWOT runs the Bay of Plenty Branch's Code of Ethics. Ethics may not be tangible but they are essential if we are to live with each other in the increasingly competitive modern world. That is, without cutting each others' throats. Sturdy individualists may still exist, but as time passes less and less room remains for independent action. An unfortunate fact of life but part of the price of progress.

We also need ethics when dealing with our complementary industries: kiwifruit growers, for example. The sources of nectar and pollen daily bcome more and more man-contrived rather than a natural event.

Marketing too is an exact science far removed from selling a pot of honey to Mrs Jones down the street. Those who attended Conference '84 learned of the complexity of our overseas markets and the amount of expertise demanded: not only in the product but in understanding the people in the various, and very different societies. Despite a good product, an excellent price, if you pass your Arab customer the pen with the wrong hand . . . !

Marketing techniques in New Zealand must also be sharpened. Hence the plan under formulation by Dudley Ward and Gavin White. But remember, these gentlemen need your help in your interests.

Change continues as you read this. Recent issues of The New Zealand Beekeeper contain comments on the use of smokers, which technique, what fuel is best. Yet the smoker may soon be relegated to the scrapheap by a clean, inexpensive, electronic device.

All very confusing, isn't it?

* * *

To the Editor

Dear Sir,

I am writing in reply to your letter to the Director, Entomology Division, DSIR, dated 20 June 1984. I apologise for the delay, but I have been overseas since March.

No biological control agents have been released against gorse since gorse seed weevil was introduced in the early 1930s. At present several other agents are being evaluated, but there are no immediate plans to release any of them. We intend to publicise any further releases long before they occur.

Entomology Division DSIR, encourages public debate concerning our noxious weed control projects so that all points of view can be considered, and we are willing to answer any questions on the subject. An assessment of the implications of our work for the apicultural industry can be found in the Proceedings of the MAF Beekeepers Seminar, Nelson 1983.

Richard Hill,
Co-ordinator, Biological control of weeds.

Editors note.

The original letter, a poor copy, would not stand recopying and was sent to the DSIR with my inquiry. Unfortunately they did not return it.

Dear Sir,

Cherishing these black-hearted dark-skinned bees for nothing much more than their ability to cope with the rigors of our climate, I was keen to try human hair as smoker fuel after reading of its success in subduing the more aggressive of the aggressive.

The pungent smell subdues the bees all right, along with worker and anything else within twenty yards of the apiary. The hair burns down to either or both a tacky or crusty glob on the base of the fire box. Disadvantage number one or perhaps number two! Another slight hitch is that the hair burns very rapidly, so by the time you get the lid off the smoke's gone. The addition of some burlap or pine needles is needed to keep up a good supply of smoke.

As I say, it certainly does work, but it's a "orrful" brew.

Victoria Whittle.

Dear Sir,

The winter issue of your excellent magazine arrived today and my attention was immediately caught by a short item: Honey and Teeth. Perhaps I can assist a little with Mr Robinson's query about the source of information on this topic. I read a report on this work in an issue of Bee World two years ago, although I am not certain which issue. However, if Mr Robinson were to write to International Bee Research Association, at the address given in your Classfied Advertisements, I am sure he wil be able to buy a copy of the relevent items.

(Mrs) M. E. Dartnell.

Dear Sir,

It has come to the notice of this Department that a number of beekeepers are using different methods of treatment of beehives in their accounts. In particular, some have adopted the practice of writing new hives down to a standard value that is significantly lower than the current cost.

Unfortunately, the standard values basis is mentioned in one or two reference books as an acceptable treatment. The publishers are being asked to correct this in future issues.

For income tax purposes beehives are regarded as plant.

The cost of hives purchased by someone commencing beekeeping and the cost of additional hives purchased by an established beekeeper should be capitalised. The cost is not deductible in calculating assessable income.

Ordinary depreciation is not allowable but first year depreciation in terms of section 112 of the Income Tax Act 1976 may be claimed in the year when the additional hives are first used. The rate at present is 25 percent of cost.

If hives which have been subject to the first year depreciation allowance are sold any depreciation recovered will be aded to the beekeeper's assessable income.

The cost of repairing or replacing hives which have become dilapidated is fully deductible.

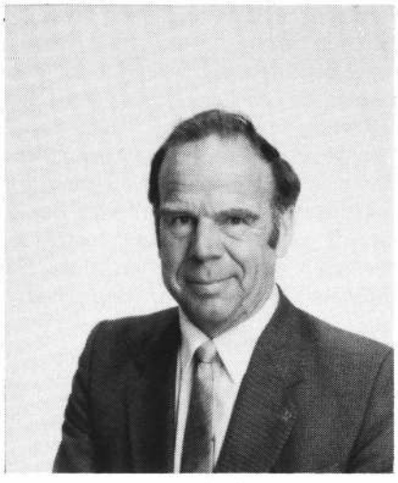
This treatment has been in use for quite some years. It was described in the New Zealand Beekeeper issue of March 1976.

The Inland Revenue Department is asking beekeepers who do not follow the current practice to make the necessary change. If you have not yet heard from us and are not using the system described in the opening paragraphs of this letter will you please take the matter up the with Inland Revenue Department office where your returns of income are filed. An orderly change to the acceptable treatment can then be arranged.

If a beekeeper has his return of income prepared by a chartered accountant I suggest that he refer this letter to him.

K. F. Arnold,
Director (Revenue).

The President's Report



President Ian Berry NBA

EXECUTIVE MEETING 10-11 SEPT 1984

All members were there, including our two new South Island members, Keith Herron and Gavin White, who made useful contributions. As usual we had a full agenda and made many decisions. The following are some of the more important:

Increase in Hive Levy

We decided to recommend to the Minister that the hive levy be increased from 17.5 cents to 22 cents per hive for 1985. This first increase since 1979 is necessary partly because of inflation and partly because of the increased activities of the NBA. Since asking Minister Colin Moyle, we have had a letter from him which makes it clear the increase will only be granted after careful consideration and by his questions we know he is well-briefed on NBA matters.

Increase in Subscriptions for the N.Z. Beekeeper.

The following recommendations were adopted to apply from 1st January 1985:

That the subscription be increased to NZ$15.00 for New Zealand subscriptions to "Beekeeper". Note this NZ$15.00 also includes the ordinary membership subscription, if such membership is desired.

That the following price differential be applied for overseas subscriptions:

	Airmail	Surface
Australia and S. Pacific	US$12	US$10
N. America and Asia, excl. Middle East	US$14	US$10
S. America and Europe and Middle East	US$15	US$10

The New Rate of Capitation to Branches from 1 Jan 1985

Based on memberships as at 31.12.84 is to be:

Commercial members	1-19	$110.00
	20-39	$220.00
	40 and over	$250.00

Plus an additional $1.50 per "ordinary" member. This increase is approximately the same percentage as the suggested increase in hive levy.

Trust Funds

The three trustees attended our meeting and discussions were held on various matters relating to the two trust funds, finally established on 1 July 1984. For further information on the trust funds please refer to page 13.

Industry Planning

It was agreed that the Industry plan be printed and a copy be sent to all hive levy payers and the MAF Apiary Advisory Officers with six extra copies to all branch secretaries.

A fairly expensive exercise but one we feel necessary if we are to get members interested and involved in industry planning. Comments and suggestions from members, branches, and AAOs are welcome. ► *Page 9*

COMMENT

BY FRANK LINDSAY

Most hobbyists read books but many subjects are better taught man to man. Beekeeping is one. Older beekeepers have hundreds of years experience between them so isn't it time they spilled the beans?

Chris Dawson is good here. Not only does he write articles but he visits and passes on his knowledge. Men like him are invaluable. Where, for example, would we be without Percy Berry to pass on his overseas marketing expertise?

Many innovations and inventions have come from small beekeepers and hobbyists, mainly because they have the time to examine the production unit while the commercial man has to spread his time over the whole yard.

How many beekeepers with bad backs stop to consider why? According to the World Health Authority the maximum anyone under 35 years of age should lift is 80 lbs, yet full depth supers frequently weigh much more. When you lift with your fingers you time the weight by ten. One false step and your whole future is affected. Should supers not be redesigned? Or should not the paddock be mechanised—the honey house is!

A wealth of knowledge from commercial beekeepers has never been committed to print. So I suggest commercial beekeepers set up a holiday scheme for hobbyists. You provide the accommodation (sleeping bag on the floor) and the hobbyists help you feed out, re-queen, extract, what have you. Many are more than keen to exchange work for knowledge. It would take a hobbyist ten years peering into his two or three hives to see all the conditions available in a commercial yard.

I should like to know how some beekeepers get eight tonnes per 100 hives; what are your techniques; how do you winter-down singles with six frames of honey? Or how about an article for this magazine? Better still, why not drop in at a Wellington club meeting next time you're down? We meet on the second Monday of each month, except January when, like you, we are extracting our honey crop.

As for innovations, I am not good at catching queens in the mating nucs. After I lost a couple I bought a catcher which solved the problem and cost a pittance. Many commercial men spend little on time-saving devices because they're too deeply involved in their product.

Most commercial beekeepers' interest finishes with the 44 gallon drum. From there on he sees nothing but his cheque. But honey packed in drums loses it flavour when repacked.

The small man, the hobbyist, has it all over you because he produces honey that tastes like honey, not bland sugar.

Without clubs and hobbyist groups to present beekeeping and honey at AP & I shows, Town and Country days, and schools, honey sales would have flagged years ago.

Astonishing how many youngsters have never tasted honey—their reaction to the thought—honey, yuck! But after tasting honey from the variety of sources they usually find something to their taste.

The film "Honey: Nature's Liquid Gold" showed liquid honey dispensers in shops so customers could taste before buying.

Many commercial beekeepers blame hobbyists for such things as disease, but the hobbyist looks more frequently and longer into the brood nest than any commercial beekeeper I know. Through regular meetings they are frequently more up to date and better educated then their commercial counterparts.

I respect the commercial beekeeper. He is an individual with ideas based on practical experience. I thank many of them for allowing me to follow them around and ask questions. I have also attended many beekeeping courses, thanks to the generosity of our apiary advisory officers. You ask them for more practical beekeeping, but do you really listen when they give it? How many commercial men will consider the new Certificate Course at the Bay of Plenty College? I'm sure there's a lot everyone could learn at that.

* * * *

BEES WIN CASE

Arataki Honey won an appeal against the Rotorua District Council's decision to allow a campsite at Waiotapu, near Rotorua.

In evidence Arataki said that at the height of the honey season hundreds of thousands of bees would cause havoc at the campsite.

Hearing the appeal, the Planning Tribunal found for the bees.

PRESIDENT'S REPORT (Cont.)

From Page 7

Promotion

We decided to make up to $1,000-00 available from general funds to our promotion sub-committee (Dudley Ward and Gavin White) for expenditure on bumper and other stickers. This material should be available in the near future and it will represent a start in our programme of providing promotion material at cost to our members.

I should like to conclude by wishing all readers a Happy Christmas and a Prosperous New Year and "Better Beekeeping—Better Marketing" in 1985.

Ian Berry,

4 November 1984.

Advisory Services

Once again we were pleased to welcome Murray Reid to our meeting and he brought us up-to-date on many important issues. Of particular interest was his report on his discussions with Mr Blackman who indicated a softening by the Rural Bank in its attitude to hives as security, and that they were now accepting security over the hives. Mr Blackman was of the opinion that a register of brands was unnecessary and that the present situation was adequate; but there was a need for sufficient details to be provided on the transfer of hives at the time of sale.

Education

We agreed to make a $500.00 bursary available to the Telford Farm Training Institute for 1984 out of general funds and that an application be lodged with the Trustees for a similar amount for 1985. The recent news regarding the future of Telford is not good and we hope their problems can be resolved and that the beekeeping course can be continued. The National Certificate Course in Beekeeping has been taken a step further by a visit to the Bay of Plenty Community College by a Programme Panel of the AAVA consisting of Messrs B. W. Imrie, G. M. Reid, and R. F. Thomas. We are still hoping to have this course in place by February 1985.

Cheaper Sugar

Following Dudley Ward's enquiries in Fiji as to whether or not it is economic for the NBA to import raw sugar we concluded a deal with the NZ Sugar Co. Ltd, for the purchase of industrial raw sugar at a substantially lower price than ordinary raw or white sugar. This took some time and members will not have been able to take full advantage of the lower price this spring. However with the experience gained, members should be able to make substantial savings in sugar costs next year. This is the major breakthrough we have been looking for for many years and we can see many members saving more than they pay in hive levy. We are pleased to welcome the NZ Sugar Co. Ltd as a member of the NBA as we feel it will lead to closer co-operation and a better understanding of each other's problems.

* * * * *

BEES MAKE IT WITH HONEYDROME

The honeydrome, to be built at the Hawke's Bay A & P Society's Tomoana showground, should prove a tourist attraction.

To be controlled by a new company, Honey Drome Expo Ltd, it will promote the honey bee and its relationship to agriculture.

A theatre will show a 360-degree 15-minute film, and a glass hive, tourist shop, and tea rooms should attract around 100,000 people during the first year, one of the directors of the company, Ralph Beamish, thinks.

He considers the tourist industry in Hawke's Bay just about to take off which makes the opening of the Honey Drome, planned for the 1985-86 season, timely.

It will be built in the Waikoko Gardens.

Expected to create about ten jobs, plans are to open the Honey Drome Sunday through Saturday. Associated ideas might turn the tea rooms into a restaurant.

Hawke's Bay beekeepers will look after the bees and fruit growers will be asked to provide fruit for the tourists.

* * * * *

HIVE PRODUCTS

PETER J. BRUNT, Course Supervisor, Nelson Polytechnic

Continued from Spring 1984

Some of this energy, as honey, is converted to a third factor, i.e., heat. A relatively high temperature in the hive is required for wax secretion, between 33 and 36C.

Workers actively engaged in wax secretion gorge themselves with honey and hang in long chains near where they will make a comb. After about 24 hours the wax secretion begins.

The hardened wax flakes are taken by neighbours, moulded in the mouth, then built into a new comb, fresh and whitish. The colour of wax on secretion is white but the plant pigments of xanthophylls and carotenes from pollens change it to yellow.

Comb gradually darkens with age. This is especially so if the comb is used in brood rearing where pupal cocoons and general debris turn black.

The building of a comb can be studied in The Hive and Honey Bee.

USES OF BEESWAX

Beeswax has many uses. In New Zealand a major use of beeswax is by the beekeeping industry itself, in the form of foundation. Foundation is commercially available in several forms which depend on the thickness of the sheet. These include Extra Heavy Brood, Medium Brood, and thin Super. Also, in a minor way, beeswax is used in queen raising.

Among other users are churches who use great quantities of candles. Until recently the Roman Catholic church would use only candles made from pure beeswax (see A Book of Honey).

In the USA the Roman church uses about 500 tonnes of wax candles annually. This represents about 0.02 percent of the annual total use or 0.03 percent of the annual total production of the USA.

Apparently Christians from the earliest times used candles made of beeswax. They were convinced of the virginity of bees and so the wax typified the flesh of Jesus Christ, born of Mary the Virgin.

Further the larger candle on the Roman altar typifies Christ, The Light of The World, and the smaller candles typify each individual Christian who strives to portray Christ in his life. Amazing symbolism!

It is obvious why the altar candles had to be pure beeswax.

Alas, economics have dictated the relaxation of the rule so candles now have about 25 percent beeswax only.

Further, and still of religious significance, is the fact that the still significant British Guild of the Worshipful Company of Wax Chandlers has undertaken to supply candles for the new high altar in St Paul's Cathedral, London, which replaced the one damaged by German air raids in 1940. They have undertaken this on a continuing basis.

Madame Tussauds, Wax Works, London, use beeswax to prepare the hands and faces of their models. Wax, which is 75 percent beeswax, apparently gives a proper translucent nature to the skin so the models have a near life-like quality.

Beeswax is used in the field of medicine too. Beeswax is incorporated into rubber in the vulcanisation process, so that the rubber can satisfactorily cover items to be implanted into the body, and so prevent reaction by the surrounding tissue.

Further medical uses of beeswax have included the treatment of ringworm, wounds, burns, eczema, dermatitis, bursitis, abscesses, and ulcers.

In treating arthritis the hot wax was applied to the affected area. The scope seems to have been endless. Other methods may now be preferred.

The cosmetic toiletries and pharmaceutical fields also use beeswax. Its main use there is as one of the solvents to allow a cream or stick, such as lipstick, to be prepared with appropriate colouring agents or drugs. This allows for ease of application.

For example, some of the stick anti-perspirants contain beeswax, among other compounds to carry bacteriocides, local anaesthetics, disinfectants, perfumes, etc.

In stick form the substance can easily be smeared.

Some cold cream bases have purified white beeswax in them which allows for the intense white of the cream. By the addition of other compounds such as almond oil or lanolin the beeswax can easily be spread over the hands.

A further interesting use is in the preparation of drugs which, if present in the stomach, would cause undesirable effects, such as irritation of the stomach lining. By encapsuling the drug in a beeswax skin the drug can pass through into the small intestine where the warmth and churning remove the layers of wax and allow for the controlled release of the drug.

Another area of use is in the protective lining or coating industry. Beeswax in a mixture has been used to prevent chromium-coated steel from corrosion.

Welding electrodes covered with a thin application of beeswax substantially reduce their absorption of water. Other waxes can be used but give less effective protection.

Beeswax has also been used in preparign fluxes for soldering. It has been used to facilitate the cleaning of reactor vessels, to wax-coat cartons for food, to prolong the storage life of frozen foods, and to coat vessels which contain dangerous and reactive chemicals.

Beeswax has been used in the ceramic and glass industries, as a component of lubricants, in the electronic and photocopying industry, in the explosives industry, and in the preparation of art materials, such as oil paints and crayons. Further it has been used in making shoe polish, furniture, leather, floors, and cars.

Now the time for polishing has been so greatly reduced, beeswax has been replaced partly by cheaper, more easily-applied products.

Chewing gum, ski wax, wax for archery bows, adhesives, all contain an amount of beeswax.

New Zealand produces about 200 tonnes annually of which about 50 percent is used locally and the rest exported. The main uses in this country are in the ➡

DID YOU KNOW?

That on 9 April 1984, a Company

"TAUPO BEEHIVE COMPONENTS LIMITED"

was incorporated specifically to manufacture **wooden beegear** for YOU.

The **QUALITY** of this wooden beegear is one of the most **exceptional** in New Zealand.

This Company sells **WHOLESALE** direct to **ALL BEEKEEPERS**.

The **SERVICE** this Company provides is to benefit **YOU**.

A large number of Beekeepers told us that they require

★ **A GOOD QUALITY PRODUCT**
We're making ours the best. For example—Using kiln dried timber for the frames to ensure they don't shrink and remain together for stapling. Making our end bars 10mm in width rather than 9mm to give added strength.

★ **WE MAKE SURE THE BEEKEEPER CAN BUY HIS GEAR WHEN HE WANTS IT**
We're stocking a full range of product at our factory so that you can buy off the shelf.
— For large orders it takes only 2 to 3 weeks to supply

★ **WE ARE COMPETITIVE IN PRICE**
We've done better than that—we've cut out the middleman. We sell direct to the Beekeeper at WHOLESALE rates ex Taupo. And providing you with freight costs is no problem, we've got these rates on hand.

YOU SHOULD HAVE AN IDEA ABOUT US NOW
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beekeeping industry. The polish and cosmetic industries are lesser, but significant, users.

Beeswax has no apparent nutritional value to us as we lack the enzymes required to digest its widely-varying components. But just mention "honey in the comb" or "honey sections" and many people's eyes light up. Far more so than at the mention of honey. So honey and wax are real and continuing favourites.

BEESWAX PROCESSING

Do you collect your cappings and scraping of burr comb? If you don't, then start. Throwing out capping, etc, means you are sacrificing a potential money-earner. You can save them, melt them into cakes, and trade them for cheaper foundation. There are three ways of processing beeswax.

These are:

* Solar Wax Melter — Uses heat from the sun to melt the wax. It is by far the easiest method. The melter is cheap to make and there are no running costs. It allows for the easy processing of wax as it becomes available.
* Hot Water — Water at a temperature above the melting point of wax, say 65° will do. Once all the cappings are melted the heat source should be removed allowing the wax to cool. While still liquid the wax is poured into a mould. The impurities settle and can easily be removed after the wax is solid.
* Oven — Wax can be melted in the home oven at its lowest temperature. The wax should be placed in a stainless steel or enamel mould. It will probably need stirring. Once molten the mould can be removed and left to cool.

Collecting wax is profitable even with a small number of hives. But in processing it is vital to keep it clear of contaminants like dirt and propolis, for they tend to produce a grey wax which is of greatly reduced value compared with white or yellow waxes.

References

The Hive and the Honey Bee Ed Dadent & Sons
A Book of Honey Eva Crane.

* * * *

INCREASE IN FORGERIES

Reports received by EXGO indicate an increase in forgeries of letters of credit and bank drafts from countries with unsophisticated banking systems or overseas trading problems. Letters of credit and drafts should always be verified by a banker no matter what their country of origin. While banks are not in the position to guarantee the validity of a document they can, and will, express doubts if there is the slightest evidence to warrant them.

BOOK REVIEW

PRACTICAL BEEKEEPING IN NEW ZEALAND

Practical Beekeeping in New Zealand by Andrew Matheson. Government Printer, 1984. Reviewed by Nick Wallingford.

At long last, a book that can be safely recommended for information about beekeeping under New Zealand conditions! For too long has there been a gap in the beekeeping literature for a book giving up-to-date information in a readily accessible form about keeping bees by the beginner or hobbyist.

The standard text, MAF's Bulletin 267—Beekeeping in New Zealand—has been a valuable reference; but is definitely dated. Methods and materials have changed considerably since it first appeared back in the 1940s. The only other book dealing especially with New Zealand conditions suffers from a lack of organisation.

Andrew Matheson's new book comes well presented, tightly organised and packed with accurate information. It will serve as both a beginning text for intending beekeepers and a reference source for the more experienced.

Even a quick glance down the table of contents gives an idea of the carefully thought-out approach. The history provided in the first chapter serves to place present-day beekeeping into context, and I feel this is a valuable contribution, too often neglected in other books. Though occasional lip service is paid to beekeeping in antiquity, in too many cases the events of the past 50 years or so are neglected.

Author Matheson has drawn heavily on his experiences as an Apicultural Advisor with the MAF, and some of the diagrams and charts will be familiar from previously published Ag-Links and other MAF publications. They have been well integrated into the text however, and show no sign of being used simply because they were there or as an easy way out. The author has simply made logical use of material already produced but not always readily available.

The photographs, clear and plentiful, are placed so as to best illustrate a point, and generally appear on the same page as the accompanying text. It is a real pleasure to see hives and beekeeping under New Zealand conditions in the photographs. It is so much more realistic for us here to see honey being taken from hives in full depth boxes rather than the half-depth that appear in photos from overseas, especially from North America. There has been no attempt to idealize the equipment in use either; hives appear just as they do in the field without the artificial "shine" of the set-up illustration.

Altogether, I feel that beekeepers and intending beekeepers of New Zealand will be very satisfied with this new offering in the field of beekeeping literature. As the author states at one point, he set out to provide "specific and practical information for beekeepers". I believe he has done that excellently. The book deals with an interesting subject, is very readible, contains a multitude of accurate detail for reference, and is attractively presented. What more could we ask for?

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TRUST FUNDS

On 4 November 1980, David Kay was appointed by Duncan MacIntyre as a one-man committee of enquiry to investigate to whom the nett assets of the NZHMA should belong in the event of its dissolution and how these assets should be used to the benefit of the industry.

A brief summary of the three main conclusions in what is now known as the "Kay Report" are:

(1) The funds must be attributed to the whole industry.

(2) The funds should be vested in a Trust Fund administered by the NBA.

(3) Limited funds should be made at concessional rates of interest to the NZ Honey Producers Co-op.

The full Kay report was approved unanimously at the 1981 NBA Annual Conference and since then most of the recommendations have been acted upon, although over a longer period than anticipated.

We have now reached a position where:

(1) The total demise of the HMA is almost a fact.

(2) The NBA Executive, under its statutory power to appoint or remove trustees, has appointed Ivan Dickinson from the South Island, Russell Berry from the North Island, and David Kay as trustees completely independent of the honey industry.

(3) Trust deeds establishing "The Honey Industry Charitable Trust" and "The Honey Industry General Trust" were drawn up and signed by the HMA and the three trustees.

(4) The two trust funds were established on 1 July 1984 with a sum exceeding $800,000.

(5) The tax paid income from the trust funds will be about $50,000 for the first year.

(6) The NZ Honey Producer Co-op is now well established and has $600,000 of the trust fund money lent to it at an average of 6% interest.

(7) The Executive in consultation with the trustees has decided that all applications for the use of the trust fund money should, in the first instance, be directed to the NBA. The annual closing date for applications will be February 28. The applications will be considered by the Executive at the March meeting and then all applications, together with Executive recommendtions, will be sent to the trustees who will decide what grants to make at their meeting late April or early May. Under exceptional circumstances only will applications be considered at any other time of the year.

Applications may now be forwarded to the Executive Secretary, P.O. Box 4048, Wellington.

Ian Berry.

On the dangers of the NBA becoming to inward-looking, one executive member warned that "the organisation may become so introspective it disappears up its own logo".

When the conference was discussing beekeeping in the high country, one delegate from the little island off Picton asked how high this high country really is. He was answered by a delegate from the deep south, somewhere near Antarctica:

"I'm not sure exactly how high it is in feet; all I know is that the 'high country' gets lower as you go south, until down our way it's nearly at sea level".

(Conference quote from The Beekeepers' Bulletin)

MOVE OVER, DOLLY PARTON

BY "LADY BEEKEEPER"

Each day I am reminded that beekeeping tends to tax the limits of what physical ability and endurance I possess. For instance, I am basically inept at using a hammer. No paint manufacturer will ever reproduce the hue of my permanently blue thumb nails. Meanwhile, there is enough of any manufacturer's primer on me, not the boxes, to cover a standard weatherboard three-bedroomer. You will never play violin-like tunes on my wire frames—they emit sounds vaguely reminiscent of bagpipe dirges.

Only ring-side seats will do when viewing my manoeuvre-the-full-boxes show. This is made more entertaining with my gymnastic display of juggling myself between the crowds of bees whom I have yet to educate on the meanings of smoke induced engorgement, population density, and distribution and cell storage capacity ratios.

Last but certainly not least, are the stings. Generally, my trepidation of such aggressive punishment is rewarded with little or no local swelling. But there are exceptions to every rule, and the exception of the minimal sting effect syndrome is one I'll now relate. During that enjoyable time of Spring inspection my overall zipper had a most untimely malfunction resulting in it being no longer bee proof and thus affording due protection to the anatomy, particularly those regions of more elevated aspect. Being somewhat daunted with the realisation that a number of stingers had taken liberty of the situation and were now wending their way groundwards on the wrong side of the garment, I immediately resorted to antics made famous by Ape Man. Such chest beating tactics did not succeed in putting the fearless five out of their misery, indeed it merely intensified their patriotism for Queen and Colony. Their kamikaze act completed, I continued my work with increasing difficulty.

Some time later I reached proportions that would be the envy of Dolly Parton. While easing myself out of the overalls I then realised that if my face was to see a plastic surgeon, my voice an elocution and singing tutor and if I kept on some of these manic-depressive bees, I just might make a go of it in show bizz. As I write I see the lights of the Grand Ole Opery, Broadway, Hollywood . . !

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FROM THE COLONIES

BAY OF PLENTY

Another busy time of the year is upon us! As I write this in the last week of October beekeepers are hurrying around the countryside preparing hives for the shift into the kiwifruit orchards, due in about two weeks. The weather over the last few days reminds us of how the spring **should** be, with warm clear days and bees working flat out.

Rain and wind have made this spring a difficult one through most of the region. Quite a lot of sugar syrup has been squirted into hungry hives, and beekeepers have had an excellent opportunity to test out the feeding of pollen supplements. With the increase in hive numbers coupled with the decrease in pollen sources, the preparation and feeding of these paddies may become a regular occurrence in the Bay of Plenty. I even heard two beekeepers discussing their palatability with the beekeeper who left his lunch behind!

The other news of the winter in the Bay of Plenty has been the formation of a new Kiwifruit Pollination Association. This will take the work done by Pollination Committee of the Bay of Plenty Branch and formalize it into an organisation better suited to represent pollination beekeepers. A set of rules have been drawn up by the committee elected at the original meeting and this is now before the beekeepers for consideration and adoption.

Liaison with orchardists has been good and beekeepers are hoping for another "safe" season as far as pesticide loss is concerned. With the rapid increase in orchardist numbers, especially with many being drawn into the industry from non-horticultural backgrounds, the education about the danger to bees from the improper use of pesticides must continue. We are fortunate indeed to have had all the work done over the years by beekeepers in the area and MAF advisers.

Nick Wallingford.

WAIKATO

At times I have mentioned pollination hives owned by every Tom, Dick and Harry (some of which have been stolen and therefore necessarily hidden away) and what could happen if disease struck them and was not recognised in its early stages. Unfortunately the very thing many of us dreaded has happened. I have to report that the Bay of Plenty and Hamilton areas have had a B.L. outbreak of epidemic proportions: an outbreak severe enough to cause considerable concern. We can only hope those affected will be more careful in future. Equipment is too expensive to burn.

The Waikato Branch had a stand at the large daffodil show, Springworld '84, at Hamilton recently. Manned by volunteers for three days it generated a lot of public interest, especially in the glass observation hive.

Hives were short of stores in early spring and we followed the usual feeding programme. Willow flow was good and hives did well. Those not on willow were very slow and when queen rearing started many were too weak to split. Those using pollen supplements report good results. Many hives started to go back and seemed to lack vigour until the barberry started. The weather cleared and we had fine warm days and for the first time in 15 or more years we had a good barberry flow. I stopped splitting and queen rearing because the flow was so good that every time I lifted a frame out, nectar poured all over the hive, drenching bees and frames, so that it became impossible to do anything other than check brood and super up.

In the Taupo area the Five Finger flow was good. Kamahi is also producing well though a pollen shortage was reported in some areas.

Rewarewa has good large buds and the Tawari is budding well.

Last season clover did not develop in pastures until after Christmas and hardly produced at all. At the moment clover is prominent in the pastures and bees are working flowers and bringing in a mixture of clover and buttercup.

We look forward to a good season, fine weather, warm ground temperatures and with last weekend's rain freshening up pastures, prospects are better than last year. After three poor years we have our fingers crossed for a big crop. Merry Christmas to all.

Ray Robinson.

SOUTHLAND

Spring build up appears to have been good but patchy in some areas. Concern has been expressed about the possibility of swarming due to the better weather.

Several Southland members were guests at the Otago Branch field day at Lawrence where an interesting programme was enjoyed by all. Thank you, Otago.

Southland's field day will be held on Saturday 2 February 1985 at Findlay Abernethy's home apiary, Owaka, near Balclutha. It is hoped to see some honey extraction, and maybe the importer of a certain brand of capping-spinner demonstrate the correct method of using the machine. There will be several speakers and we hope the new apiary advisory officer for Otago will be there to meet members. Included will be competitions, including the Herron Trophy for gadgets, and the very popular honey baking. Ladies may like to bring some of the different crafts they are

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involved in for discussion with others. Owaka has an indoor swimming pool for children.

We recently held a special general meeting at Balfour to discuss the NBA Industry Plan and branch responsibilities. We also discussed spring management of hives and the use of raw sugar, now available through the branch. Some of the problems discussed were how to mix the syrup as thick as possible to prevent fermentation, and how not to feed too close to honey flow. Cliff van Eaton showed the video on brood diseases and talked on the latest developments in the varrine mite problem in Texas. If the export of bees from Texas to Canada is prohibited this may put strain on the queen rearing industry in New Zealand.

Les Foster.

NORTHLAND

This spring has been rather difficult with very changeable weather. The conditions of hives is fair with most beekeepers feeding heavily. We had little rain in October and so far prospects look good.

With pollination just around the corner, the branch has arranged signs for members to put up outside their orchards: SPRAY-FREE ZONE. BEES AT WORK!

LOST WEEKEND IN NORTHLAND—22, 23, and 24 February 1985. This could be the weekend you have been waiting for. Remember the Kaitaia and Waitangi conferences? This promises to be even better.

The branch plans to hold a field day-social-wine tasting session in the Bay of Islands on the last weekend of February 1985. Make tentative plans now. Even book a bus. Branch secretaries will be advised of final details early in the new year. If you are interested in joining us please contact our secretary.

The branch meets regularly at Kaikohe and Whangarei alternatively.

Pat Gavin.

WESTLAND

Spring arrived fine with mild temperatures and as it progressed seemed to get warmer and warmer. Hives wintered well and took advantage of the fine weather, and seemed to work every plant from gorse to plum trees, pussy willows and crack willow, very heavily. It must be the best early spring we've had in years; certainly the best weather during the willow-flowering for a long time. Subsequently the hives progressed quite well.

However, as we approached October, temperatures dropped and cooler weather brought rain and snow in the high country. Where the ground had been dry and firm, affording good access, it is, at the time of writing, soft and

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muddy. But, it's an ill wind that blows no one some good, and, if nothing else, the cooler weather should slow down wasp build-up.

With the fine mild winter and early spring, queen wasps started nesting very early this year. Young worker wasps appeared in many areas by late September. Had this buildup continued unchecked we would be in for one of the worst seasons for wasps in years.

The consensus amongst the farming community on the Coast indicates a dry summer. It would be welcome as our past few summers have been anything but! A fine December would help in assuring a good crop of Kamahi which could be built on by pasture sources, given fine weather in January.

So we approach the summer, trying to hold out in optimism and not be overcome by the many "Ifs" in this business.

. . . So here's to a good summer.

Sandy Richardson.

AUCKLAND

Here we are again at the start of another honey season. Around Auckland the barberry is flowering very heavily and the weather (with the exception of a couple of very windy days) has been just great. The bees are working early morning till late evening with quite a flow of nectar coming in. Some sugar feeding was necessary during late winter.

Beekeepers have been busy preparing hives and making increases for pollination. There have been quite a number of swarms around from early October. With the warm weather this season could just be the one we have been waiting for.

Will any hobbyist beekeeper who subscribes to The NZ Beekeeper, and who wishes to receive notice of branch meetings and field days, please write to either Branch Secretary Helen Wright, Portsmouth Road, Bombay, or Chairman Arthur Ellis, 19 Kuawai Rd, Mt Wellington.

Dave Young.

MARLBOROUGH

So far this season has been beyond all expectations. With good autumn flows the hives all wintered well with strong populations. That enabled bees to take advantage of excellent kowhai and pittosporum flows in the early spring, the exception being the heather areas in which the hives have gathered very little surplus, although the hives themselves are strong.

At this stage the hives are strong in all areas, but the excellent spring weather has us worried about the prospect of an early drought. You can never win in this game.

A plant which I rate as one of the top spring flowers in my area, on a par with barberry is NZ or Mossi Susmine (Parsonsia Heterophylla). It is a creeper and on Marlborough hill country is found everywhere on matagouri bushes. It gives a terrific flow and often hives produce a box of surplus in November on it. A plan I consider should be part of the high country beekeeping environment.

This year our local beekeepers' association has been working with the Nelson Polytech in drawing up a programme to provide a range of educational programmes for beekeepers in Marlborough. Some options include beginners and advanced beekeeping courses, pollen and nector sources with pollen identification, and financial management with emphasis on obtaining finance. We hope that by using the expertise of the Nelson Polytech the Association will be able to help our members become better beekeepers.

Craig Deans.

POVERTY BAY

Well, spring has arrived or did we miss it!

September passed with only four fine days in the whole month, and rainfall well above or nearly double the monthly average.

Local beekeepers lost an average 30 percent of their hives. Because of the bad weather bees missed out on early food sources, willow, etc, and the paddocks became so muddy that site access was impossible. Feeding therefore was difficult.

After a poor season last year winter stores were generally low, and of the hives that did survive some had dwindled to less than nucs. Therefore many of us involved in kiwifruit pollination will be under pressure to meet commitments.

A lot of hives are being shifted into citrus blocks in an attempt to build them up. This month, October, we've had the annual spring strong north-west gusts, which have not made a bad situation better.

However, with cooperation between local beekeepers, hive manipulation, and feeding, kiwifruit growers should get their bees.

A successful two-day queen-breeding course was held in conjunction with the local community college and MAF, and much experience and knowledge was gained by those there.

Well, to all local beekeepers who may read this, as the old saying goes: Things will get worse before they get better".

Peter Lamb.

CANTERBURY

The province seems set for drought with a very mild and dry winter behind us and the water table at an all-time low. Some irrigation pumps bring up more air than water.

Generally the hives have come through the winter and spring in above average condition. That has affected the hive weight. Subsequently a lot of extra sugar and feed honey has been used. The cheaper raw sugar couldn't have come at a better time.

The willow flow was better than we have been used to in Canterbury for a while; and those of us lucky enough ➔

to have gorse and broom in the area have benefited from an abundance of pollen because they flowered exceptionally well. Even hives on the black currants have managed to gather currant honey which has really given them a boost.

Clover is coming into flower early this year and the signs are for an earlier season than usual. Let's hope it is not short-lived.

Best wishes for the season and let's hope we can keep our bank managers happy this year.

Richard Bensemann.

NORTH OTAGO

North Otago has gone from a mild, dry winter into a very mild and dry spring: one of the driest springs on record. However, just as the willow came into flower along came gale force nor'westers and what could have been a very good willow flow finished as very mediocre in most areas, but we were thankful for small mercies.

At present even the most prudent beekeepers are beginning to scratch for feed, due entirely to the mild weather. Most hives are not full strength, of course, and the problem now is to prevent swarming, which started very early this year, and to maintain hive strength for the main honey flow, almost two months away.

What may help is that farmers were advised to reduce stock and already truck loads are being shifted to greener pastures. But we do need rain, and plenty of it, or once again we shall be tightening our belts. That is a pessimistic view, and as long as it rains in the next two weeks we'll be OK.

If we could swop some of our weather with Southland we should all be happy. However, this is just one of the problems of working with Mother Nature.

As these are our last notes for the year, and with Christmas a bare eight weeks away, I should like, on behalf of the branch, to wish everyone in the industry all the best for a happy Christmas and a prosperous New Year.

G. E. Winslade.

HAWKE'S BAY

Our branch meetings are now held at our local community college, central between Napier and Hastings. We can also use their film and video systems. Recently we had a slide show and a talk by Dean Compton on his recent trip to the USA. He worked with several beekeepers and was able to give a first hand account of the acrine mite discovery in Texas.

September brought 100 mm of rain to most of Hawke's Bay—more than welcome. Unfortunately only one or two

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days in October were wet. Because of bad weather earlier our orchard pollination of pip and stone fruit has continued longer than is normal.

Andrew Matheson's beekeeping book has proved popular and a good number of orders have been taken.

Hawke's Bay now has another queen breeder. We wish John and Jenny Dobson all the best with their new venture.

John Walker.

OTAGO

After the relatively mild winter we have been blessed with some very good weather during August and September. October has been changeable and now Labour Weekend has well and truly shown us once again that Antarctica is next door.

Hives have wintered well but were strong early and so we have to keep at them with feed and proper management. The willow flow returned a good bit in some places but I hear from a friend in Central of a nil take thanks to strong winds.

Otago's spring field day was held at Lawrence. A good programme with several speakers. Subjects: marketing, packing and promotion, a practical demonstration spring inspection (with actually B.L. present in the hives, and a visit to the premises of the local apiarists, Mrs and Mr Travathan.

We were especially pleased to meet Mr and Mrs Carl A. Johansen. Mr Johansen is well known through his work at the Department of Entomology, Washington State University, on the poisoning of honey bees by chemicals. The talk about his work and trials, often done on irrigated plots in deserts, was very interesting and most appreciated by his audience.

Commercial members got together under the leadership of our Apiary Advisory Officer a few weeks ago to discuss queen raising. The venue was Milton, where two beekeeping outfits were visited and systems compared. Very worthwhile indeed.

Now as to the continuous saga of Ken who told us that he got stung through the soles of his boots last autumn and could not afford a new pair. Nation wide beekeepers must be stingy for no size 14s arrived after our urgent appeal. However Ken can carry on now after receiving a Rural Bank Loan. We did not want to be nosey by Ken volunteered the information anyway. The loan is for $53.85 for 30 years.

John Heineman.

P.S.

As Ken wants to get his own back it must now be reported that the old duffer (author of the branch report) made up a batch of good top feeders last winter. Hard-board bottoms with a piece of 75 x 50 mm with two holes drilled through for bee access from below. They are in use and work well but for one. Holes were drilled through from the top but forgotten at the other end. No syrup taken up. Wonder why? It pays to check. Must be old age starting to tell!

NELSON

Things have really been buzzing around here for the keepers of bees. Besides placing our hands to our hearts and solemnly declaring to abide by the conditions enumerated in a "Code of Ethics", we have also circulated sinister "Letters of Intent". The former relates to abolition of plundering of established apiary sites and the latter to registered pollinators in the Nelson area committed to supply rectangular hives 99 cm tall brimming over with pollen-seeking bees in all stages of maturity. That's it. If you're in the hatchet trade you're out while the rolled paper-truncheon makers are in!

Having perused the 1984/85 NBA Industry plan containing such titles as: Missions, Goals, Objectives, and Action Plans, I'm buying a sleeveless shirt to save the time-wasting, rolling-up procedure. We mean business in these here parts. We were fortunate to be included in the timetable arranged for Dr Carl Johansen of Washington State University. His talk which focused on the scientific application of toxic sprays contrasted strongly with the "Let's wop the tankful on and get back to the base quickly" attitude.

By coincidence a leaflet promoting a biological control spray against leafrollers and their cousins, without harming the bees, came through the branch letter box. Great stuff! Just add a disguised sterility agent for the benefit of the protesting minorities and we will really be getting nowhere!

Meanwhile the bees, in the darkness of their broodnests, have proceeded with the business of sucking sweet nectar from the willow, barberry, and hawthorn, raising their drones, and polishing up their swarm cells.

And we staunch members of the Nelson branch will wind up 1984 on December 12 at the Richmond Mall, picking chicken bones and slapping each other's backs between intermittent gulps of Nelson's super-strong frothy ale.

Fred Galea.

WESTERN DISTRICTS

As I write it's a month to wait until the nectar flow starts. Conditions for the spring build-up of colony strengths have been most favourable; spoilt only by a week of cold, windy weather when the willows flowered. Conditions of hives and pastures are ready for a good start to the honey season.

It could be double the number of hives going into the kiwifruit orchards in mid-November. Pollination service is becoming a most important part of beekeeping in the coastal region.

We welcome the news about feed sugar being available at a more reasonable cost. Our committee is meeting later this month to work out ways of buying it.

A very well attended meeting in Palmerston North in September farewelled Bill Rodie on his retirement after 35 years' service with MAF's Apiary Advisory Service. Ian Berry, Stewart Tweedale, Stan Young, Frank Linsay, and I all spoke on behalf of apiarists and hobbyists in the region.

John Brandon.

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Commercial Beekeeping in Michigan

By: Dean Compton

During a visit to the USA in June and July I visited a few commercial beekeepers in Southern Michigan. One, Hannars' Apiaries, operates 1100 hives within the area of Schoolcraft, and is situated 200 km east of Detroit and 50 km from the Indiana state line.

Phil Hannar, the owner has been a commercial beekeeper for twenty years. He started beekeeping from the basement of the house, then he moved to the garage and finally reached the establishment he has today. He and his son Brian do all the work. They have outside employment only at extracting time when they employ a couple of girls.

During my visit there they were at the supering stage with the prospect of a good crop despite a lack of rain in southern Michigan. All hives had two full-depth supers as brood chambers but all other supering is done only with shallows. The beekeeping season starts after a very harsh winter with temperatures of -10°F in most Northern states. The beekeeping season is from April to August when a number of nectar sources are available but some for a very short time only.

As in all beekeeping areas certain crops out-value all other nectar sources. Their first honey flow comes from the dandelion at the beginning of May, and in a good season their hives may gain a surplus of 30/40 lbs. Due to the early flowering of the dandelion all this honey is left for spring stores. Normally the dandelion flowers for about two weeks only. The black locust also flowers during this time but often fails because the frost gets the early buds, or when in full flower it rains. Black locust probably produces a good crop about once every four years as the flowering period is usually a week, perhaps two in a really good year.

At the beginning of June vetch, a major crop comes into flower. In a good season and a good area some hives run up a couple of shallow supers of honey. Vetch generally grows anywhere and in some areas overruns complete paddocks. Established vetch is a beekeeper's dream. Directly after vetch sweetclover comes into bloom. There are two types of sweetclover: yellow and white. Of the two yellow is the first to bloom but the white lasts the longest. July 10 sees the spotted nap weed (or star thistle) begin ➡

PUBLIC RELATIONS PART TWO

Michael Burgess

How to deal with magazines

Apart from those purely for entertainment, magazines are usually specialist: The NZ Bee Keeper, for example.

Most welcome suitable manuscripts. I stress "suitable" because of the number of articles on topless go-go dancers that turn up on the desk of the editor of The Christian Brothers' Monthly.

A quick glance through a magazine will usually give an idea of the kind of material it wants. Some list the number of words, i.e.: "Articles should be between 500 and 1,500 words. Longer articles by arrangement with the editor."

All articles, without exception should be typewritten on A4 size paper double-spaced, with a couple of inches left top and bottom, and with a margin of at least one and one half inches on the left and one inch on the right. Handwritten manuscripts are not acceptable. All manuscripts should be accompanied by a stamped addressed envelope for the return of the article if not suitable.

Some magazines pay, some don't. Those that do sometimes state how much a thousand words. Others pay something between what they can afford and what they think you will accept.

All editors will edit your work, irrespective of who you are or the standard of your prose.

If you are a good writer then the editing will be minimal. You will also be subject to "house style". That means you may spell "wagon" with one "g" but house style demands two. A number of words have more than one acceptable spelling. Punctuation, too, has general but no firm rules. Yours, although perfectly good, may be at ods with house style.

Editors do not edit to mutilate. At least, tradesmen editors don't. They have too much else to do. Moreover they are more than delighted when articles needing little or no editing arrive on their desks.

However, many articles, although good, do need editing, and editors must insist on a certain standard of prose. They should inevitably edit "Adverse weather conditions" to "bad weather" and "this point in time" means nothing but "now".

Remember, you know your subject, the editor knows his. Surely it is a combination of talents?

Editing should not change meanings. Editing is to improve presentation, not change facts. If a meaning is changed during the editing it usually means the point was not clear and the editor has had to take a stab at it. And if it is not clear to the editor it will not be clear to the readers.

There are, of course, some editors who will run everything as given. They are usually honorary amateurs and out of their depth.

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"Beekeepers have to be optimistic to the point of stupidity" (From a beekeeper).

(Conference quote from The Beekeepers' Bulletin).

COMMERCIAL BEEKEEPING IN MICHIGAN (Cont.)

to flower. Regarded as the big crop it can, in an average season, fill at least a couple of supers. During the autumn both aster and golden rod help to build up winter stores before the hives are closed down for the long Michigan winter.

In an average season most beekeepers expect about two and a half shallows, or about 70 lbs of honey with 70/80 lbs of honey left on the hives for winter stores. Taking honey off starts around August 15. Anything the bees gain from this point is used soley for winter stores.

Hannar's use fume boards 90% of the time to remove honey from the hives and on cloudy days they prefer to use bee blowers because they don't upset the bees so much. They remove around 150 shallow supers a day which are stacked on pallets on their Ford pickup. The honey is then taken to the honey house and extracted in much the same way as we do in New Zealand.

Hannar's Apiaries have a variety of strains of bees but prefer the Mraz and Starline Queens as they winter much better in Michigan. Their winter loss is around 6%. Most beekeepers south of Grand Rapids don't use wrapping during the winter but rely on natural windbreaks against the strong winds. All hives are ventilated with small holes as many hives are covered with snow and as the snow melts the holes enable the bees to go on cleansing flights.

Of the many diseases facing American beekeepers Hannars tend to have a slight problem with foulbrood etc. The drug Terramycin is commonly used against foulbroods and Fumidil B against Nosema. Hannars spend about $500 a year on Fumidil B, because they feel that treating for Nosema helps reduce their winter losses.

Generally beekeeping is much the same the world over but beekeepers must adapt to local conditions to gain a honey crop. All in all my visit to Hannars Apiaries was both interesting and rewarding, it was a great delight to work amongst my fellow beekeepers in Michigan.

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Industry Planning Report

"Don't lay any certain plans for the future—it is like planting toads and expecting to raise toadstools."
—Josh Billings, American Humorist. 1818-1885

Although written over a century ago, these words are probably even more relevant today when rapid changes and advances make planning a very precarious exercise! Because of present-day uncertainties, the need to make best use of our resources is more important than ever; and the beekeeping industry is no exception.

The last few issues of this magazine have included reports of the planning exercise underway for about eighteen months. I would like to briefly review these activities, answer some questions which have arisen from it, and then look ahead.

What has happened so far? Following the unanimous adoption of a remit at Nelson Conference in 1983, calling for an Industry Planning Forum, a group involved in the administration of the beekeeping industry met at Flock House in May last. They introduced us to the system of planning called 'Management by Objectives', now the basis of our industry's planning process.

Management by Objectives (MBO) (or Mumbo), is currently used by many Government departments and large organisations, including MAF, who guided us at Flock House and at Conference '84 at New Plymouth. Those at Conference '84 further contributed to our Industry Plan by taking part in 'buzz groups', discussing the various ideas which arose at Flock House, and by providing a wider range of suggestions for the Action Plans to follow.

In addition, planning has been on the agenda at each Executive meeting held over the period, and some NBA branches have introduced the process at meetings and field-days.

Where are we now? In October this year, all hive levy payers should have received a copy of the results of our efforts to form a plan for our industry, in particular the NBA. This is the *1984/85 NBA Industry Plan*, which outlined the *Mission*, or *aims* of the Association; a series of six long-term *Goals* to work towards; a number of *Objectives* set

to reach these goals; and a detailed list of immediate *Action Plans* of activities required within the next few months to achieve the objectives or at least attempt to do so.

I hope that sometime in the rush of springtime beekeeping, those who received a copy may find time to read it carefully. I also hope you will contribute by criticism, suggestion, or support for the activities outlined. For those non-hive levy payers interested in the Plan, branch secretaries have spare copies, or contact the Association Secretary in Wellington.

We are already well through the first cycle of our planning system. The Action Plans show some activities as already carried out, and more are in train by the various NBA groups. At each Executive, Action Plans are reviewed, and new ones initiated if need be. Many branches have reacted to the Plans, and more will as the process continues. Of course, Action Plans do not include *all* activities of Executive or branches. A great many other details are attended to as they arise.

Where to go from here? Over the next few months, we shall take further actions within the Plan outline. At the March meeting of the Executive, the plan will be fully reviewed. Also, Branches will be asked to carry out their own review before Conference '85, and to discuss further objectives and actions. Such changes or additions can be initiated by a remit to Conference, through a branch report to Conference, by discussion groups planned for 1985 Conference, or by direct approach to Executive, either individually or as a group.

Following Conference '85 the 1985/86 plan will be produced, incorporating new activities, and updating earlier ones not yet achieved, or which require some follow-up. Outlined below is a diagram of the anticipated *NBA Planning Cycle*, to show how the various stages of the planning process fit into the calendar year for the Association.

I should like to raise some of the questions encountered during the planning process, and reply to them.

Question: Why do we need this planning now—we always managed before?

True, but often in the past it has been *'management by crisis'*: that is from crisis to crisis, each problem as it arises, or after it is beyond the point of repair. A planned approach aims to anticipate difficulties before hand, and to meet them head on.

By declaring our intentions ahead, we also strengthen our case with outside agencies, such as Government, because they can see where we are going, and can offer the assistance we require.

Question: But is planning just for the Executive—are the rest of us involved?

Very much so. A main point of planning is to involve everyone. We do that through branches, conferences, individual approaches, and of course, Executive activity. The Executive is largely a co-ordinating body. One of the major objectives is to achieve better communication and understanding, both within and beyond our industry.

Question: Is planning just another seven day wonder? A flash in the pan? It will be if we allow it. However, part of the planning is, the development of a *long-term* industry plan. This should ensure that planning continues to be important. The emphasis placed upon this by MAF was underlined by John Scott in his address to Conference '84.

Question: Who does our planning?

We have so far but in the future we look towards planning being an integral part of branch activities, conference procedures, as well as Executive business.

In summary, I outline the five reasons why Industry Planning is important to our future.

1. **ACCOUNTABILITY:** A declared plan of action means someone, somewhere, is responsible to see it through.
2. **CONTINUITY:** One difficulty in the past has been that oversights and loss of ideas result from staff changes. An ongoing plan means actions and objectives will continue even though people come and go.
3. **EFFICIENCY:** A planned approach *must* be more efficient since it fully utilises time and finance, always scarce.
4. **COORDINATION:** By planning we ensure resources are properly directed, that everyone is heading the same way. That does not mean loss of individuality, rather it allows individuals more opportunity to use their particular talents.
5. **AWARENESS:** By looking ahead, planning towards the future, we can be more aware of changes taking place and so modify our actions to meet them.

Finally, I am reminded of the story entitled "Don't Panic" which the Editor included after the Industry Planning Report in the Winter issue.

I am sure most of us can relate to that bee, but had the bee *planned* better the story might have been different. The bee did come through, but only after wasting a lot of energy in fruitless struggle, and spending a very uncomfortable time in hostile surroundings. Had he, for example, been aware of the cow's approach, or better still come to some mutual arrangement with the cow not to be eaten in the first place, then his life would have been much more pleasant. And his final resting place would have been much more satisfactory than a pile of 'manure'. Personally, I opt for the planned approach.

Allen McCaw.

A letter to the General Secretary, those attending Conference '84, and also the ladies.

I wish to take this opportunity to sincerely thank you all for the lovely get-well card sent me from Conference while I was in Southland Hospital. I can assure you I was very pleased with your very kind thoughts and to read the names of so many on the card whom I have met at conferences over the years. Once again let me thank you one and all for your kind message.

Yours sincerely,
Jack Glynn.

CERTIFICATE IN BEEKEEPING COURSE

This course, designed by the Bay of Plenty Community College, is primarily for prospective commercial beekeepers. It lasts two years and is based on correspondence and short residential courses. It will be of value to self-employed beginner-beekeepers, sideline beekeepers, and employees of beekeepers. It consists of 10 written modules and three short courses as follows:

Introductory Short Course: A one-day short course to introduce student and tutor, will also describe the course and prepare students for self-study.

Module One: hive management—history of beekeeping, beekeeping in New Zealand, regulations affecting beekeeping, basic management for honey production, bee stings and allergies.

Module Two: entomology—classification of insects, social behaviour in insects, the three castes of the honey bee, sensory perception.

Module Three: hive equipment—the concept of the bee space, basic hive equipment, preserving beehive equipment, ancillary equipment.

Module Four: apicultural botany—plant biology, nectar, pollen and honeydew producing plants, honey and honeydew poisonous to bees and to people.

Module Five: colony behaviour—division of labour in the colony, activities of the worker bee, communication among bees, pheromones, queen rearing impulses.

Module Six: hive manipulations—a two-day short course covering topics related to practical beekeeping. Swarm prevention, feeding, requeening, shifting bees, wintering hives.

Module Seven: pollination and agricultural chemicals—importance of bees as pollinating agents, crops needing or benefiting from insect visitation, mechanics of pollination, management of hives for pollination, agricultural chemicals.

Module Eight: diseases and pests—diseases and pests affecting bees in New Zealand, diseases and pests of bees that are not present in New Zealand, importations of bees and equipment, other pests that attack the colony or combs.

Module Nine: honey harvesting and handling—vehicles

WESTLAND'S RATA-KAMAHI FORESTS —HERE TODAY, GONE TOMORROW?

BY: IAN PAYTON

Anyone making the trip west over Aurthur's Pass cannot help noticing the abrupt transition from the essentially monotypic mountain beech *(Nothofagus solandri* var. *cliffortioides)* forest in the east to the mixture of tree crown shapes and sizes of the rata-kamahi forest in the Otira Valley. This transition is particularly striking when the flowering of the southern rata *Metrosideros umbellata)* blazes the slopes with scarlet.

But although the forests of the upper Otira Valley appear predominantly healthy, this impression is quickly dispelled as you travel on down the Otira and Taramakau Valleys towards the coast. Here the forests of the steep valley slopes contain an ever increasing proportion of dead and dying trees of southern rata, and to a lesser extent of kamahi *(Weinmannia racemosa)*. This apparently excessive mortality of both rata and kamahi can now be seen in many places in Westland.

Southern rata and kamahi are major components of the hill country forests in the high rainfall areas west of the South Island Main Divide. For the land manager their major importance lies in an ability to provide a stable forest cover on the steep and relatively unstable hillsides associated with the Alpine Fault, a major faultline traversing Westland. Their importance to the beekeeper however is as a major source of nectar, a fact which is borne out by the drop in honey yields in seasons when rata and/or kamahi flower poorly or not at all. Continued excessive mortality of rata and kamahi then can be expected to reduce honey production in Westland, and with it the viability of the beekeeping industry.

Increased mortality of rata and kamahi in Westland forests was first commented on in the 1940's. By the mid-1950s it was deemed serious enough to warrant an inter-departmental government inquiry. This inquiry concluded that while possums were primarily responsible for the death of canopy trees of rata and kamahi, and ground browsing animals for the destruction of the forest understorey, these changes had flow-on effects of changed microclimatic conditions, depleted bird life, and increased insect and fungal activity. They concluded that the problem was a complex one, needing further study. Such study has been a long time in coming.

Since then two main schools of thought have predominated; one advocating the possum, possibly in conjunction with ground browsing mammals (for the most part deer), as the main cause of rata and kamahi mortality; the other advocating that other agents, usually scale insects or fungi, are more likely to be the major factors involved. More recent work on the structure and regeneration patterns in rata-kamahi forests has led to suggestions that much of the observed mortality may result from predominately even-aged stands dying of factors associated with old age.

The resolution of these apparently conflicting hypotheses lies in gaining a better appreciation of how the forests function and of how they are affected by introduced animals. Rata and kamahi are frequently the main tree species to colonise slip surfaces on steep hill slopes in Westland. Here they form predominately even-aged stands. A good example of such a young even-aged stand with its tightly closed canopy can be seen from the bridge at Goat Creek near Otira. Such stands not only show the vigour of youth, but in time also the frailty of age. So if you speculate that at some time in the past an earthquake or similar catastrophic event triggered a lot of landslides,

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CERTIFICATE IN BEEKEEPING COURSE (Cont.)

for beekeepers, taking honey off the hives, extraction plant and process, food hygiene regulations.

Module Ten: packaging and marketing of hive products—honey marketing, quality control, packaging, other hive products.

Module Eleven: business administration—beekeeping organisations and advisors, budgets and cash flow forecasts, loan procedures, taxation.

Module Twelve: a two-day short course on queen rearing theory and practice.

The Hive and the Honey Bee will be required reading.

The short courses will be at several places around the country, generally at a Community College, Polytechnic, or Technical Institute.

The introductory course will always be in February or March and the others in September or October at the end of each year's work.

Students must visit a selected beekeeper at the end of each year's work for an oral and practical assessment of the year's work.

The course will contain no formal written examinations, although the two-day short courses will include written tests. Students will be assessed on their answers to study questions at the end of each written module.

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such an event would also initiate another round of regeneration. Such a cycle it is argued, may now be approaching old age.

Proponents of the idea that insects and/or fungi are important factors point to quite extensive stands where rata and kamahi have died in the apparent absence of possums. Up to now there argument, which suffers somewhat from a lack of clear documentation, has largely been dismissed as a pro-possum lobby. However pests and diseases cannot be entirely dismissed. An example of wilt in kamahi, caused by a fungus *(Sporothrix)* gaining entry via pinhole borer *(Platypus)* tunnels and killing the trees by blocking the water-conducting tissue, has recently been documented at Camp Creek, near Rotomanu.

By far the most attention however has been given to the role of the Australian brush-tailed possum in rata-kamahi mortality. These animals were liberated at numerous points throughout Westland between 1895 and 1930 to establish a fur industry. While direct experimental evidence for a link between possum browsing and death in southern rata and kamahi is not yet available, there is considerable circumstantial evidence for such a link in the increase in southern rata and kamahi mortality as possum numbers increase. For southern rata, this mortality is initially confined to larger (or older) trees, while adjacent younger trees, especially those forming even-aged stands on slip sufaces, remain healthy, despite the fact that trees of all ages are browsed. Recent defoliation studies suggest that the continued survival of these young rata stands is, at least in part, a result of their vigour and is related to a greater ratio of energy-producing (leaf) to energy-utilising (stem and root) tissue in young trees than in older trees.

In addition, current experimental work suggests that possums do not browse trees of southern rata and kamahi randomly. Rather, one or more animals will repeatedly brows the new canopy shoots on one or a few trees until the trees die.

What then of the future of Westland's rata-kamahi forests? It now seems reasonably clear that possums are a major factor involved in the observed increase in rata-kamahi mortality in Westland over the last few decades. Whether by preventing the buildup of high possum numbers we can hope to retain southern rata and kamahi as substantial components of these forests remains to be determined. What is clear however, is that factors such as possum browsing do not operate in isolation. For example, if as is observed, possum-induced mortality of southern rata is primarily confined to larger (or older) trees, the net result may well be forests of a similar composition, but with a younger age structure. Add to this however the tendency for larger (older) rata trees to flower more profusely than smaller (younger) individuals, and the result is a reduction

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in seed availability, which in turn will influence the composition of the plant communities colonising new slip surfaces. We need to develop an understanding of the range of factors involved, and of how these are interrelated.

There are two areas in which we would appreciate your help if your beekeeping operations or other outdoor pursuits take you into areas where rata and/or kamahi are present:

- We are trying to build up a picture of years in which southern rata flowered well, or conversely did not flower, so that we can test some ideas on the factors governing flowering in this species.
- We would like to document cases of rata and/or kamahi mortality which do not appear to be the result of possum browsing.

If you can contribute, please send any comments to Ian Payton at the Forest Research Institute. Thank you for your help.

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Mature tree of Southern rata in the final stage of defoliation by possums. Photo: J. Barran.

LIBRARY NOTES

PRACTICAL BEEKEEPING IN NEW ZEALAND by Andrew Matheson, 1984, 185 p., N.Z. (See Review in this issue).

NEW ZEALAND PEST AND BENEFICIAL INSECTS, Lincoln University College, edited by R. R. Scott, 1984, 371 p, NZ.

A comprehensive study book covering Agricultural, Horticultural, Forestry, Rangeland, Household, Livestock,and Medical pests occurring in this country. Also a chapter on parasites and predators which control harmful insects.

The part on Bees and Pollination, written by B. J. Donovan and R. P. McFarlane, also includes much information about Native Bees, Alkali and Bumble Bees, and Leafcutter Bees. Kiwifruit and Lucerne pollination are discussed. Very good B/W photos, drawings, and diagrams in abundance right through the book. A very valuable addition to our library.

DUNEDIN BEEKEEPERS' CLUB CALENDAR OF EVENTS 1983-84, by John Garraway.

John, a very thorough part-time beekeeper, and a past executive member of the Otago Branch, has been very much the driving force behind the Dunedin Beekeepers' Club, organising meetings and mini field days. At the request of members his talks have been duplicated and attractively put together. A series of eight talks takes one through all the phases of sound hive management, from August to April, as applicable to the Dunedin region. A very worthwhile effort towards better beekeeping. Even if one does not live in or near Dunedin it won't be a waste of time to read this collection of good and sound advice. Especially recommended for beginners. (Donated by the author).

QUEEN BEE PRODUCTION COURSE, Tairawhiti College, Gisborne, September 25-26, 1984.

All the handouts and notes well presented and neatly put together. A comprehensive collection of material about and related to the subject of queen-rearing. Included is a paper given by Mr Harry Cloake, Timaru, about his way of raising queenbees. His system works very well (at least for us) in this part of the country and it would pay those who plan to raise a fair number of queens to consider Mr Cloake's system.

These notes were supplied by Trevor Bryant, Advis. Officer MAF, Tauranga.

Our first batch of CATALOGUES has sold out. A second, amended, version is now available at the old price of $2 (plus 40 c post).

* * * *

HIGH COUNTRY BEEKEEPING

By: N. J. Ledgard and W. Simes

The March 1983 issue of this magazine carried an article entitled "Honey production at 900 m in Craigieburn Forest Park" (Ledgard & Simes, 1983). The authors reported on a two-year study which monitored the honey harvest of six hives and tried to relate hive weight gains during the summer to climate. Weekly weight gains were found to be closely linked to temperature, particularly above 19°C. This article, by the same authors, reports on the third and final year of the study, when emphasis was placed on the daily weighing of one hive.

The site, the prevailing climate, and the hive management procedures, were all described in the 1983 article, and are not repeated.

METHODS

In this study five hives were monitored, four weighed weekly as in previous years, the fifth weighed daily. All hives were sited together, with the one to be monitored daily mounted on a set of platform scales capable of weighing up to 111 kg (Figure 2). Weighing was carried out at 0900 hours just before the daily weather records were taken from the nearby Craigieburn meteorological station. The observer simply had to release the weighing arm, adjust the weights so that the arm was free swinging, record the weight, and relock the scales into a neutral position.

The whole operation usually took less then one minute, and did not disturb the bees. Weighing was begun on 8 December 1982 and was continued for 115 days until 1 May 1983.

All hive parts added during the season were weighed before addition and their weights subtracted from the total, so that the weights given represent additions made by the bees only.

RESULTS AND DISCUSSION

Hive Weight.

Over the trial period, the five hives showed weight gains of 51 (the hive weighed daily), 52, 62, 25, and 49 kg, with an overall averages of 48 kg. This average was significantly down on the average of 79 and 80 kg recorded in the ➡

previous two seasons, and probably reflects the unsettled weather of the 82/83 season, both cooler and wetter than average.

Hive Weight and Temperature.

The pattern of hive weight-change during the season was similar for all five hives. A more detailed study of the relationship between hive weight gain and temperature was undertaken for the hive weighed daily. The daily weight gains or losses were charted against daily maximum temperature and are presented in Figure 1. Results were very similar to those of the earlier study, with 19°C being the critical threshold temperature above which gains were made and below which losses could be expected.

Virtually all exceptions to this pattern occurred on the days immediately before, or at the end of, a warm spell of weather. Weight losses occurring during cool weather often continued into the first day of a warmer spell, possibly as the bees reorganised themselves for efficient nectar collection and processing. This lag at the start of a warm spell occurred in six of nine warm periods monitored. Similarly, but less frequently, weight gains sometimes continued into the first day of colder temperatures after a warm period. This usually occurred when warm periods cooled gradually. A typical sequence of weight gains and losses is given in Table 1.

Hive Weight and rain/wind.

Warm days in the high country are frequently windy, but wind appeared to have no significant effect on the activity of hives on this site.

Wet, but warm, days were too infrequent to determine whether rain had any effect on hive activity.

CONCLUSIONS

Temperature obviously played an important role in controlling the activity during the study. Temperature changes of just few degrees were often sufficient to reverse a hive weight gain or loss situation. In any environment,

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Figure 2. One hive, mounted on a set of platform scales, was weighed daily.

particularly at higher elevations, temperature patterns vary markedly with location, usually in relation to aspect and exposure. Therefore, all beekeepers should pay particular attention to finding warm sites for apiaries, especially in the high country, where the cooler nights can depress hive temperature well beyond sunrise. In these situations, where hives are allowed to cool significantly at night or are situated so that they cannot be warmed quickly by the rising sun, full use cannot be made of early morning nectar flows, which are a feature of some important forage sources (e.g., Viper's bugloss, *Echium vulgare*).

REFERENCE

Ledgard, N., Simes, W. 1983. Honey production at 900 m in Craigieburn Forest Park. *The New Zealand Beekeeper*, No. 177. pp 25-27.

Figure 1 Relationship of daily maximum temperature + gain in hive weight from 8/12/82 to 1/5/83 (115 days)

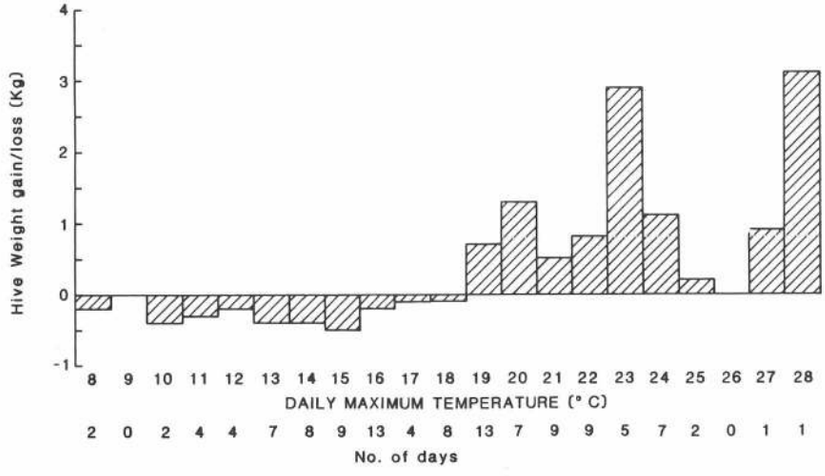

Table 1. A typical pattern of the weight gains/losses associated with a period of warmer temperatures.

Date	Daily max. temp. (°C)	Hive weight gain or loss (kg)
13.12.85	12.9	−0.1
14	19.8	−0.8
15	19.2	+1.8
16	24.7	+3.3
17	20.6	+3.4
18	18.6	+1.8
19	18.6	−0.7
20	16.0	−0.3

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CORRECTION

ACARINE IN THE U.S.A.

After sending a "Stop Press" to the Editor about the discovery of Varroa in the Rio Grande Valley in Texas, I made further enquiries and found it was Acarine not Varroa. After a hasty phone call to the Editor, I felt we had narrowly averted what could have been an unfortunate error. However the error still slipped through, for which I must apologise. In a letter recently received from the U.S.A. by Dean Compton, it appears **Acarine** has now been found in the following states:

Texas
New York
South Dakota
Florida
Louisiana
Nebraska

Ian Berry

Editor's Note. It was my fault, not Ian's, so I apologise.

OTHER PUBLICATIONS

INTERNATIONAL BEE RESEARCH ASSOCIATION

Regularly publishing new information on bees, beekeeping and hive products, for beekeepers and scientists all over the world. IBRA Representative for New Zealand: T. G. Bryant, Apicultural Advisory Officer, Ministry of Agriculture & Fisheries, Private Bag, Tauranga. Catalogues of publications and details of journals and membership $0.55; specimen copy of journals: **Bee World** $1.10. **Journal of Apicultural Research** $1.10. **Apicultural Abstracts** $1.55. INTERNATIONAL BEE RESEARCH ASSOCIATION, Hill House, Gerrards Cross, Bucks, SL9 ONR, England.

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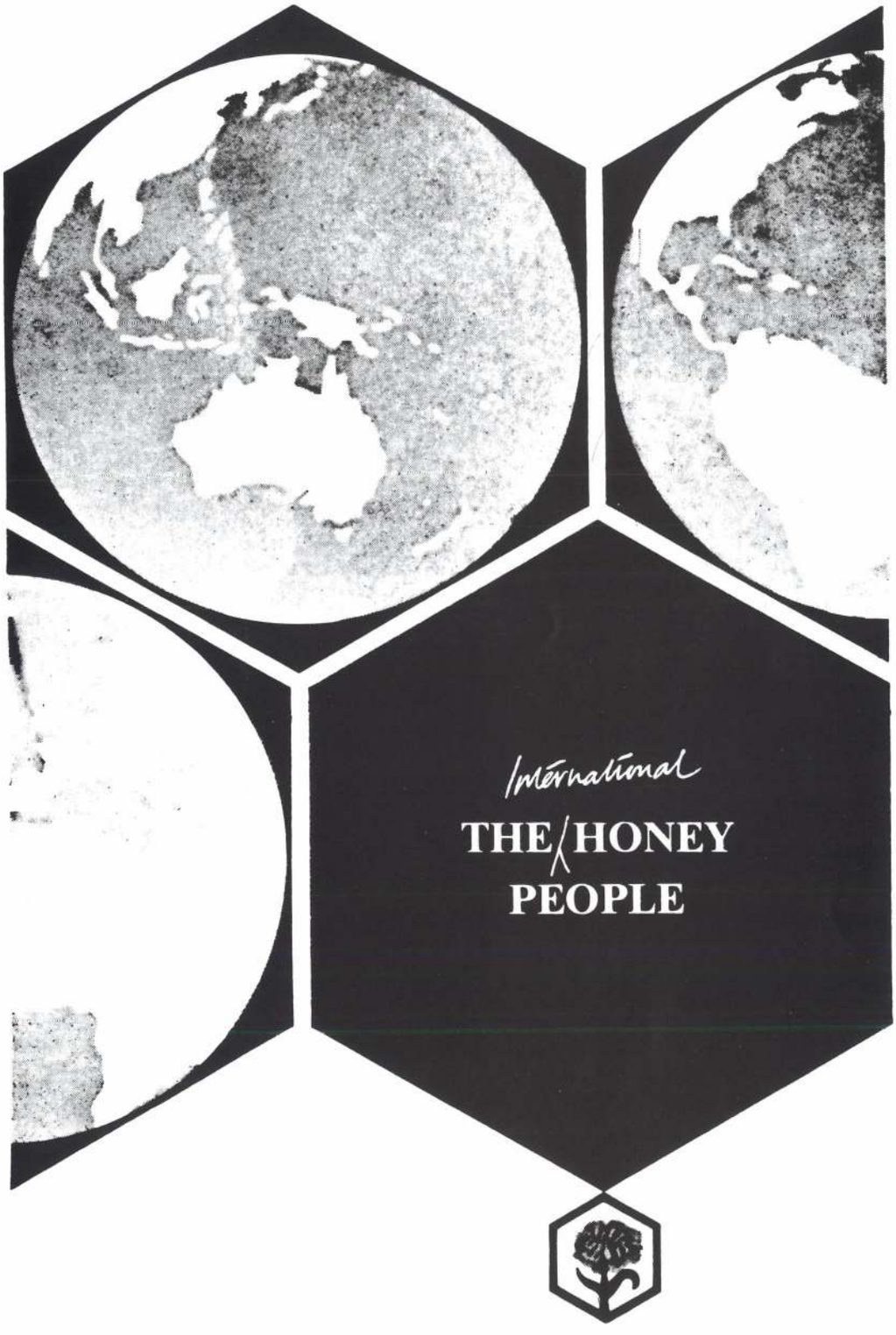

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