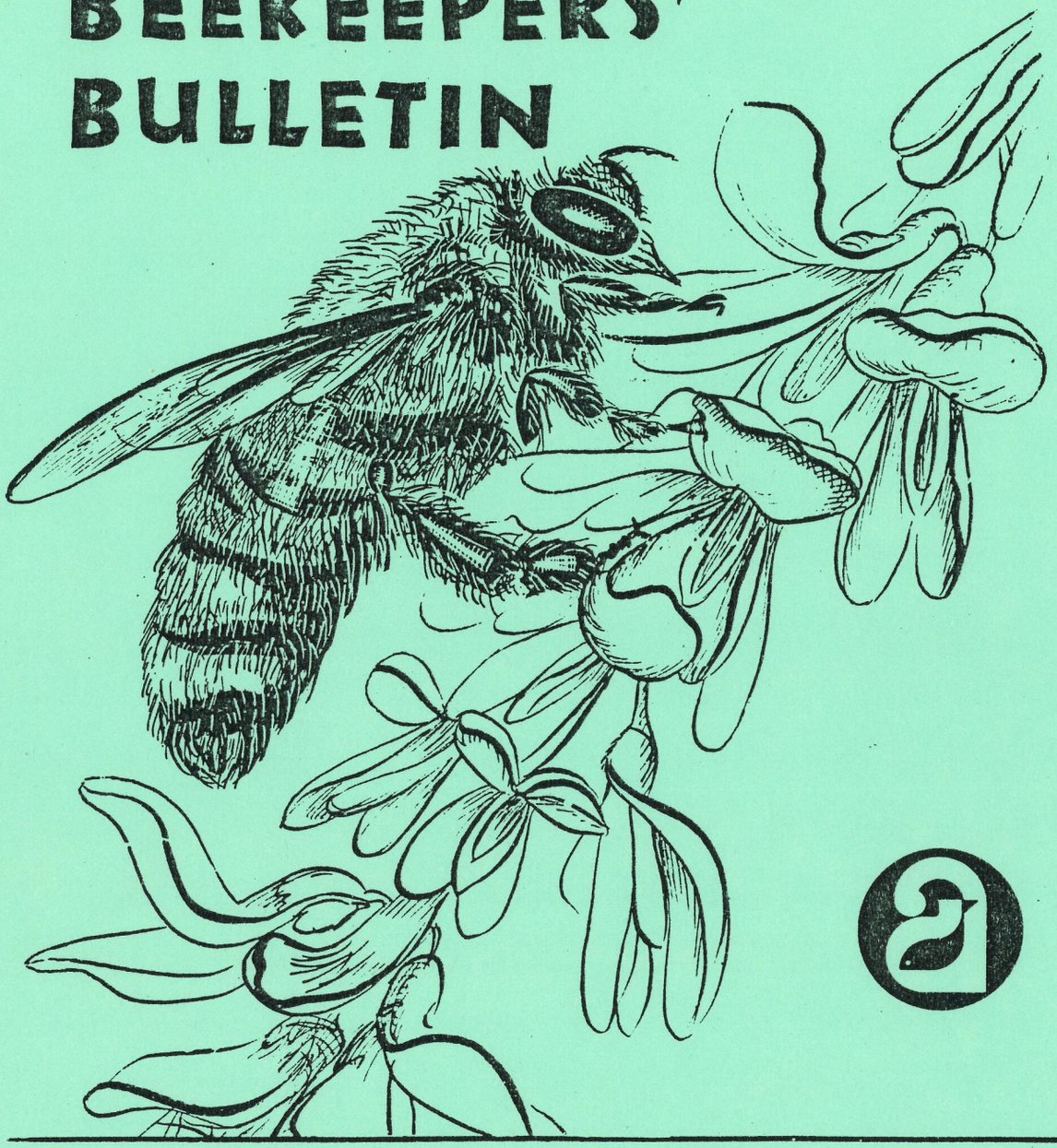
# THE BEEKEEPERS' BULLETIN



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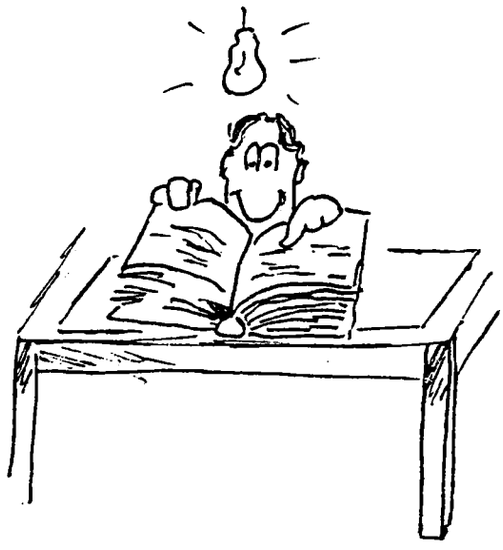


THE EDITORIAL DILEMMA

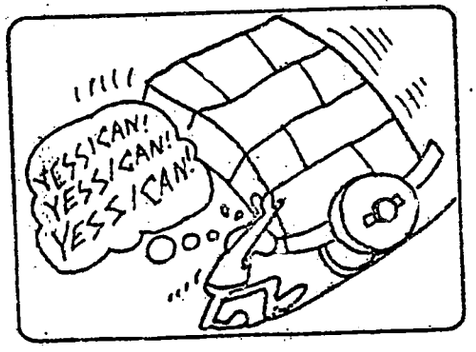
Getting out a newsletter is no joke.
If I print jokes people say I am irreverent.
If I don't, they say I am too serious.
If I clip things from other magazines I am too lazy myself.
If I don't I am stuck on my own stuff.
If I don't print every word of every contribution I "don't appreciate genius".
If I do print them "the columns are filled with junk".
If I make a change in your article, I am "too critical".
If I don't I am blamed for poor editing.
Now, as like as not, someone will say I swiped this from some other source.
I did!

# REGIONAL DEVELOPMENT REVISITED

More in the saga of regional development finance for beekeepers. This was to have been stopped after last year's budget, but a "stay of execution" was granted. In the meantime a survey was called for on current financing for the beekeeping industry. The survey was conducted by guess who? - the Rural Bank.

The results of all this investigation is like a good news/bad news joke. The bad news is that there's no more money to be lent by Regional Development, and the good news is that Rural Bank will use hives as security.

The concept sounds great and looks like a breakthrough on the part of Rural Bank, but the details are a lot less exciting. For established beekeepers hives will be taken as collateral security only up to half of the value of hives or $10,000, whichever is the lesser. That's not much capital when you consider that the average owner/operator enterprise is worth $180,000.




For new commercial beekeepers the position is no better. They must have at least two years full-time beekeeping experience, own at least 100 hives, and be in a position where the business is economic, or potentially economic. The same limit of $10,000 applies, and loans are normally for only five years.

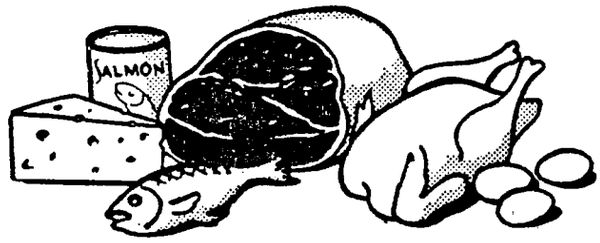
This is a bit like a Catch-22. The Rural Bank won't lend unless your business is already economic, but it's extremely difficult to build up a new commercial outfit to that stage without any loan finance. I certainly can't see any other agricultural industries prospering when caught in such a dilemma.

As a result of this new policy, Regional Development Councils have been instructed not to grant loans where hive purchases make up any part of the development project. Assistance will be confined to honey processing and packing, as well as to preliminary investigation grants for investigating beekeeping development new to a region.

The whole thing reminds me of what the Chinese say about business deals - you know the deal must be a good one if neither side is satisfied. The hope is that the $10,000 maximum might be raised in the future once it become apparent just how inadequate that figure really is.

POLLEN MAKES GREAT FOOD - FOR BEES

Long life, good health, virility - you name it, pollen gives it. Or does it? All sorts of claims are made about this food- how do they stand up to scrutiny?




*Claim:* Pollen is nature's most perfect food.

There is no one perfect food, only those that are better for various forms of life. The perfect food for the sea cucumber is organic debris sucked up from the ooze at the ocean's bottom. To larva of the siliphidbeetle, decaying meat is a perfect food. For the hookworm there's nothing better than blood.

According to studies by the National Academy of Sciences, the best dog food differs from the best guinea pig food, and all of them differ from the ideal human diet. Thus, because pollen may be the best food for bees (or at least the best they can lay their hind legs on), there is no basis for conclusion that it is the best, or anywhere near the best, food for human beings.

*Claim:* Pollen retards aging, as shown by the longevity of natives of the mountains of Russian Georgia who owe it all to their pollen rich diet.

According to a study of the eating habits of elderly persons in the Caucasus region of Soviet Georgia, "Sixty percent ate a mixed diet of milk, vegetables, meats and fruits. Seventy percent of the calories were of vegetable origin and the remainder from meat and dairy products. Seventy to 90 grams of protein were included in the diets. Milk was a main source of protein."

Although honey (which does contain some pollen) was sometimes included in the breakfast menu, along with cheese, bread and tea, the scientist conducting the study made no mention whatever of bee pollen, even though they were looking for some dietary clue that might explain why these people live so long.

One centenarian's recipe might be less than attractive to those men who believe bee pollen wards off old age. Gabriel Chapnian, estimated to be 117, gave his prescription for longevity as: "Active physical work, and a moderate interest in alcohol and the ladies."

*Claim:* Pollen is the richest source of protein known to science.

The major constituent of pollen is carbohydrate; not pollen. The protein concentration of pollen varies from 5 to 28%, depending on its source. Many foods contain more protein than even the bee pollen with the highest protein content. For example, soybean cake contains 46% protein; raw soybeans, 38%; dry pumpkin seed 29%, brewer's yeast, 39%. For comparison, steak is about 20% protein.

The amounts of pollen usually contained in pollen tablets or capsules are insignificant. Even if pollen is high in protein there are less expensive sources, including filet mignon.

*Claim:* Bee pollen relieves allergies, asthma and hay fever.

There are no scientific studies to support this claim. On the contrary, scientists believe that bee pollen is especially hazardous for persons with allergies, asthma or hay fever. Dr M D Levin, director of the Carl Hayden Bee Research Center in Tucson, Arizona, warns pollen users ".. to be aware of its potential to trigger an allergic reaction."

This view is supported by cases in scientific studies. In one instance, 15 minutes after a 46 year old man with a history of seasonal allergy took bee pollen he developed anaphylactic shock and required emergency treatment.

Dr. Stephen Cohen, an allergy specialist conducting research on stinging insects and bee pollen at the Milwaukee County Medical Complex, tested two women who experienced acute allergic reactions after eating small quantities of bee pollen. He stated that bee pollen can be deadly to persons with allergies. "Some people are sensitive enough that oral exposure to it will cause a significant reaction," he said.

*Claim:* Various athletes state that bee pollen has improved their performance.

Assuming the person making such a statement is not doing it for a fee, such claims, called testimonials, are based on personal belief, not evidence of effectiveness. Medical history (as well as the history of food fads) is crammed with instances of people claiming various types of benefit from useless, and sometimes even harmful substances, primarily from the plant world.

*Claim:* Scientific tests prove that bee pollen enhances athletic performances.

In a 1975 test sponsored by the National Association of Athletic Trainers, the Louisiana State University swimming team participated in a six month experiment in which half the team took 10 pollen tablets a day, one quarter received 10 placebo tables (externally

identical to the pollen tablet but devoid of pollen), and the other quarter received five pollen and five placebo tablets. There was no measurable difference in performance among the three groups.

The test was later repeated with 30 swimmers and 30 high school crosscountry runners. As one of the researchers, Dr John Wells of LSU, said, the bee pollen was "absolutely not a significant aid in metabolism, workout training or performance."

*Claim:* Bee pollen can alleviate a virtual encyclopedia of ailments, including sexual malfunctions and tendencies toward suicide. (One promotional pamphlet listed 80 separate afflictions, from "growing pains" to cancer, which it claimed bee pollen had treated successfully.)

There is no valid scientific evidence for any therapeutic benefit from bee pollen. What's known about bee pollen, compared with what's claimed is commented on by an authoritative book on pollen biochemistry, which says "While pollen, or its equivalent, may be irreplaceble in the bee diet, we fail to see a correlation with suggested benefits to man ..."

Reference: US Food and Drug Administration Consumer, April 1984.

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REPORT THAT FOULBROOD!

A lot of you seem to have forgotten that AFB is a notifiable disease. That means you must report any BL to this office, preferably in writing (or by phone). The Act says this must be done "forthwith", and the dictionary defines that word as "immediately, without delay".

MAF's disease control programme is not being done for fun. We're spending considerable time and money to assist your industry, and it's fair to expect your co-operation in return.

Several times recently our disease control efforts have been hampered by unreported disease. To try and prevent this happening, I've included with this issue some disease reporting forms. Please use them to report any cases of AFB.

*Why this new requirement?*

It's not new, you've always been required to give prompt notice of AFB. This new system just makes it easier for you.

*If we use these forms, what's the point of the annual inspection statement?*

The annual inspection statement enables you to provide more details of apiary sites, update hive numbers, and to list all the disease found.

*Isn't that doubling up on the notification sent in earlier?*

Yes, but doubling up provides double checking that all disease is reported. The notification forms enable us to build up an up-to-date picture of disease outbreaks, and the annual inspection statements provide a cross-check that no disease is missed.

*But MAF inspectors never come in my area, do I need to use these new forms?*

Yes. You'd be surprised where teams turn up.

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GET YOUR OWN SECRETARY

Having problems with book-keeping and accounts? Is your office management up to scratch? Spending too much time on sorting out records for the accountant? If you can answer yes to any of these, it might pay to look at the services offered by rural secretaries.

Rural secretaries undertake a one-year diploma course at Lincoln College, studying accounting, finance, horticulture, management, plant and animal husbandry, field studies and office practice.

Rural secretaries usually build up a group of several growers for whom they work, spending at least one day a month with each. The basic work of the secretary is to take the farmer's business affairs to the state where s/he gets the most benefit from his/her accountant and adviser.

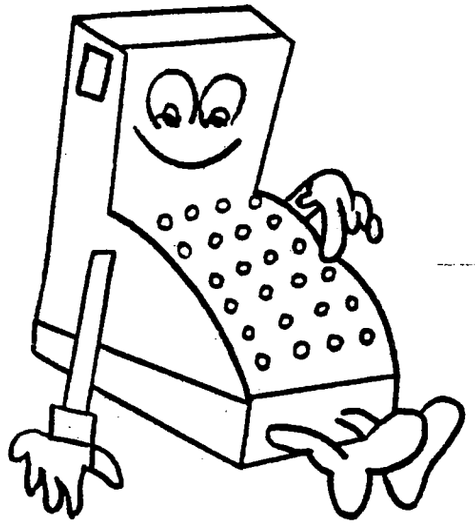
The rural secretary is an accounts clerk, filing clerk and private secretary all rolled into one. She looks after the payment of accounts, filing, wages, business letters, income and expenditure records, cashflow budgets, rebates (such as petrol and electricity concessions). She is able to deal with all the office needs of each individual grower.

The cost of a rural secretary for an average of one day per month would be approximately $80 per day plus travel. This fee is totally tax deductible - so the cost to the grower is minimal; added to which your accountant can immediately get

to work on your accounts as he does not have to spend costly time in putting your accounts in order before he starts.

Rural Secretaries belong to a professional Association which acts as a support group for the secretaries and a contact point between secretaries and farmers. The Association also provides guidelines to professional standards and to fee charges.

If you would like to know more, the New Zealand Association can be reached by writing to: N.Z.A.R.S., P O box 18, Lincoln COllege, Canterbury; or by ringing its Vice President, Mrs Kathleen Burford, at Christchurch 227-565.



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POLLINATION INFORMATION

This is a reminder that we need the co-operation of all kiwifruit pollination beekeepers. As explained in the last *Beekeepers' Bulletin*, MAF requires a list of growers supplied, and the number of hives for each contract.

I've already contacted everyone known to be involved. If you haven't received a letter about this, what we need is a list of:

- orchardists' names and addresses,

- numbers of hives supplied to each contract.

Individual information will be kept confidential, and only trends and totals will be made public.

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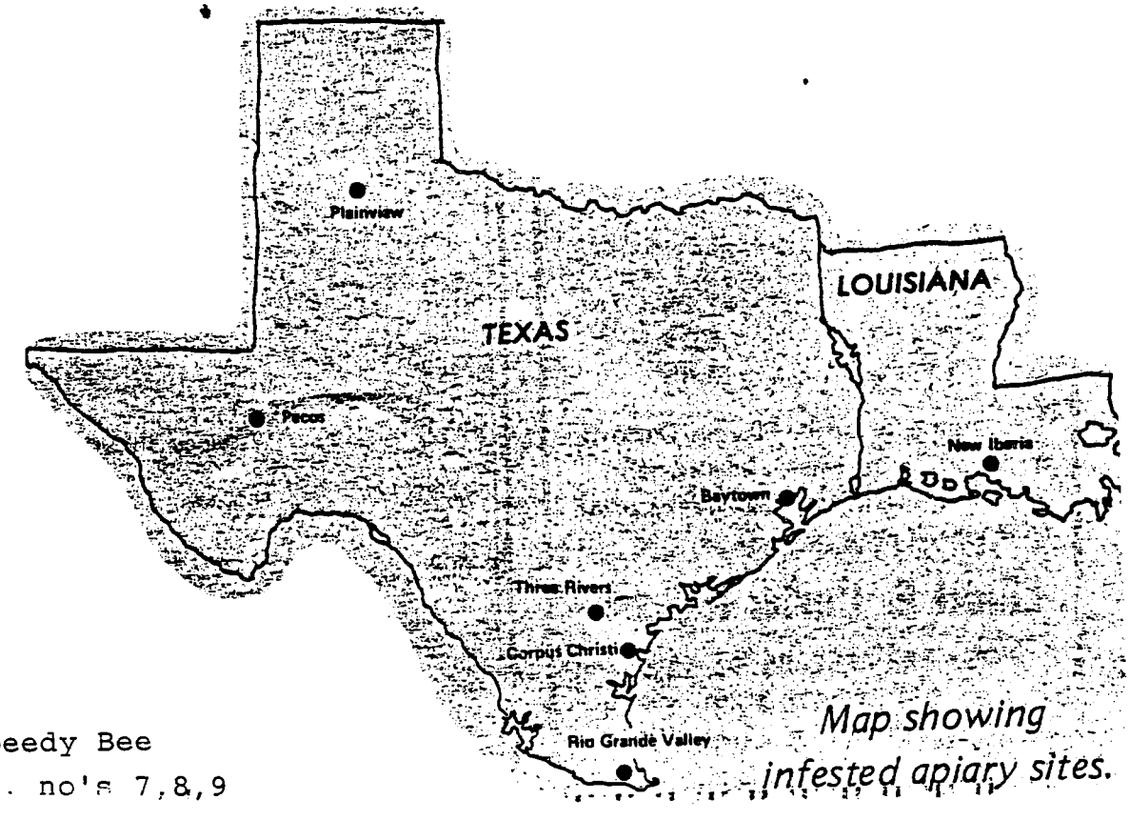
MITE - BEE : US

Oil wasn't the only thing running in Texas this year. Acarine mites have now moved from Mexico into bordering Texas. This find in a commercial outfit about 250 km from Mexico has led to an extensive colony search, trace back and quarantine programme. And now, destruction of all colonies which are within 800 m or which have comingled with the infected colony.

The little beastie causing all this fuss is a very small animal which lives and feeds within the air tubes of the honey bee. It can cause a decrease in colony performance depending on the strain of bee being used. (Further information on the mite is in "Know your diseases" - this issue.)

Since that initial discovery the mite has been popping up in other parts of Texas and also in neighbouring Lousianna (as can be seen in the map). The infected areas are quite distant from one another but can be traced back to the original beekeeper who supplied beekeepers in the area with packages and queens.




*Map showing infested apiary sites.*

Ref: Speedy Bee
Vol: 13. no's 7,8,9

Once the mite is found in an area all colonies within 800 m of it are quarantined; ear marked for destruction. At present many colonies along the Mexico-US border are awaiting this fate whereas in areas where colonies have been destroyed the hives are needing restocking. An interesting point here, applicable to all those involved in the local branch's "Code of Ethics" is that it was a 800 m cut-off point for destruction of colonies. How far away are yours?

Already 2,500 colonies have been depopulated - kill the bees (and mites) and keep the woodware. Depopulation, begins with the removal of surplus honey - if it is left on, it is no longer safe to eat. All those nooks and crannies (backdoor entrances) are taped over to make the hive beetight. Then at dusk, cyanide is introduced through the front entrance and the hive is sealed and left. An hour and a half later the hive is opened for airing, and released to the owner along with the dead mites and bees. After all managed colonies are killed, bait hives are put out to attract "wild" bees. Any wild colonies will be sought out and destroyed.

Canada imports queens and packages from the US and have now placed a ban on all imports of those from Texas. If this ban was to spread to other states then who would supply Canada with queens and packages? Could we?

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KNOW YOUR DISEASES - 3. ACARINE DISEASE

The acarine mite is much in the news at the moment because of its discovery in Texas and Louisiana. Let's look at this mite, and the effects it has on honey bee colonies.

*Acarine disease*

Acarine disease (or acariasis) is the name of the condition or disease in honey bees which is caused by infestation with the acarine mite *(Acarapis woodi).*

*Acarine mite*

The acarine mite is microscopic, and cannot be seen with the naked eye. It lives inside the adult honey bee; mainly in the tracheae (breathing tubes) of the first thoracic segment, but also in air sacs in the head and abdomen. The adult and larval mites feed on the bee's

haemolymph ("blood").

Symptoms

There are no outward symptoms in a bee that is infected with *Acarapis woodi*.

It used to be thought that infestation with acarine partially suffocated the bee and impaired its ability to fly. This is now known not to happen. Infected bees can fly and forage for nectar and pollen jsut as readily as uninfected bees.

The only effect acariasis has on a colony results from the shortened life span of infected bees. Overwintered infested bees die sooner than uninfested ones, and the difference starts to become significant in spring (March onwards in Britain). The death rate is higher than replacement rate at that time of year, and infected colonies may die.

Colonies with more than about 30% of workers infested are more likely to die in spring than other colonies. However, the number of such colonies is low - perhaps only 2% in the UK, where infestation is probably as high as anywhere in the world.

Overwintered, infested bees that die prematurely do not look abnormal before they die. They do not crawl about at the front of the hive or become hairless.

Spread

*Acarapis woodi* infests bees when they are less than 9 days old. They move from bee to bee only by direct contact in the hive. No transmission occurs via flowers or honey combs. A gauze screen separating uninfested bees from infested ones will prevent transmission of the mite, even if the bees can feed one another through the screen.

Control

Various control measures can be used against *A. woodi*. Chemicals which kill the mites but not bees (acaricides) are dispersed inside the hive either by vaporisation (e.g. "Frow's mixture") or by igniting an impregnated strip (e.g. "Folbex:, "P.K."). None of these have been gazetted for use in New Zealand.

Breeding resistance is the most promising control method, as there is significant difference in resistance to acarine between different strains of bee. For instance, North American bees (which for several centuries have not been exposed to acarine mite) are much more susceptible than British bees.

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A NOTE FROM WASHINGTON

"Shim" and his wife Vivian certainly enjoyed their time here. In a recent letter to me Shim wrote "We need to get together with Cam Jay (who was in NZ last year) and see who can "out-bore" the other with slides of New Zealand. Everything about New Zealand, its beauty, people, weather etc, far exceeded our expectations. Please pass on our regards to all our beekeeping friends".

Thanks again to all of you who helped to make their visit both enjoyable and worthwhile.

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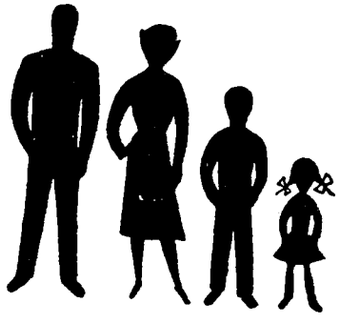
WHO BUYS HONEY AND WHY?

We don't really have answers for that question in New Zealand, but an Australian survey has some that are interesting. The survey was commissioned by the Australian Honey Board, and finished last December.



Some of the rsults are:

- People generally think that honey (in relation to other spreads) is high quality, relatively inexpensive, good for the whole family, good for use in cooking, is relatively free from additives and preservatives, is good for the health and is good tasting.

- the vast majority (73%) of honey purchases are made through supermarkets. "Health food" stores account for a furhter 7% of sales; roadside stalls 6%, market stalls and fruit shops a further 5%.

- On average, survey respondents purchased honey slightly more often than once a month.

- "Name" brands of honey currently account for approximately 54% of sales nationally; generic and house brands for 17%; and unbranded or bulk purchases of honey for approximately 15%.

- Consumers are ill-informed regarding the quality, taste and colour differences between generic and name brand honey.

- Advertising awareness for honey is low, although this result was expected.

- Honey is perceived as a relatively inexpensive product. A price rise of up to 33% would be acceptable for containers

of honey currently retailing at below $1.00. A 25% rise would be acceptable for the more expensive containers.

- The more frequent purchasers of honey tend to see honey in a greater variety of 'creative' occasions, especially when cooking, than do the less frequent purchasers. Infrequent purchasers could possibly be induced to consume more honey if they were informed of these more creative uses.

- There exists some measure of confusion amongst consumers of honey regarding the properties of colour, and consistency and their effect on taste or quality. Frequent purchasers are not more informed regarding these properties than the infrequent purchasers.

Source: Consumer market survey. *Australian Bee Journal* 65(4):6-7, April 1984.

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SIMPLE HOT ROOM

One good idea from across the Tasman is for a lift-up hot room. It's simply a chest made of polystyrene, which is lowered over stacks of supers so they can be heated up.

The example I saw is big enough to take 20 pallets of supers, each six boxes high. The heat comes from hot water circulated through copper pipes embedded in the floor, and in winter this is supplemented by a mobile steam heater. It is essential to have a fan to circulate the warm air, and a thermostat to control the cabinet's temperature.

This hot room can easily be lifted out of the way when not in use. When it is being used, it is lowered over the supers until they are warm. Supers are removed for extraction 50 at a time, and new ones put in.

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EXPORT INFO

*The Exporter* magazine continues to be a valuable information source for marketers. A recent issue, for instance, had quite an extensive survey of health food markets in different countries, which was based on information from New Zealand trade commissioners.

Some extracts:

- In Japan the major New Zealand health food exports are green-lipped mussel extract and various bee products including honey, comb honey and bee pollen.

- Estimate shown the Japanese health food market as high as $US1.74 billion sales a year with annual growth rates of up to 30% a year.

- Retailers at an Australian natural food convention were concerned to move its image away from one of pill-popping quacks to a more credible nutritional image. That entails the education of the retailers by the manufacturers, and so credible literature is needed on the product for consumers and retailers explaining research and the medical benefits of the product. Manufacturers should also provide co-operative advertising for both retails and distributors.

- Professional packaging and product presentation are of paramount importance for health food segments of the retail market.

- The product life cycle of health food products tends to be relatively shorter than other segments of the retail food market in Australia.

For further information contact the Export Institute, whose address was in the last *Beekeepers' Bulletin.*

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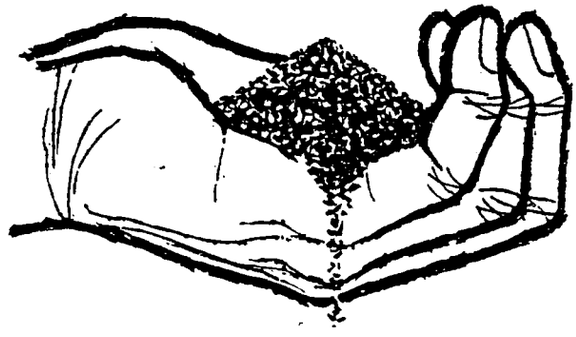
CHEAP SUGAR



Plan your autumn sugar feeding now, and save money! Nelson branch is taking advantage of the NBA's bulk sugar purchasing deal. This means quite a saving for industrial raw sugar : 35 kg bags are

$22.30 for orders of less than 30 bags

$22.00 for orders of more than 30 bags

This is a big saving on the $27.30 normal price for raw sugar.

Contact the Nelson branch's purchasing officer, who is

Glen Kelly
45 Pah Street
Motueka (MU 89931)

Terms are cash up front, and the sugar is freighted free to the nearest railhead.

Other branches - have you got into gear on this yet?

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TAX TIPS

A person from the Inland Revenue Department spoke at the conference seminar in New Plymouth. He reminded beekeepers that:

* Records must be kept for 10 years.

* All records must be kept, not just business transactions. Personal cheque books, receipts and family transactions not requiring stamping should also be kept.

* Wax is a by-product and doesn't need to be recorded as stock-on-hand. It can be entered as a nil value or at cost if you wish. Obviously it must be declared as income when it is sold. This was a revelation to most beekeepers, and means you no longer need to store all that wax under your bed.

**"Oh, come out Sam! It's been months since you filed your income tax".**

* Honey has a value once it is in the honey house (feed honey excluded). Its value must be recorded when it is in a ready for sale form, which means in a drum or in a retail container. The value can be set at either the selling price or the cost price (either purchase or production cost).

* The investment allowance of 20% (in the first year only) on plant and equipment is for individual items that cost over $500 each. Hives would not qualify even if you purchased more than $500 worth, because individually the hives are much less than $500. You can, however, claim the 20% first year depreciation on hives that are new to you, i.e. they

may well be second-hand hives, but they are "new" to you.

* Our man couldn't answer the question "If pollination is the main source of income, can honey be regarded as a by-product?"

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TRADE TABLE

* Ceracell Foundation Ltd, formerly of Warkworth, have a new address:

24 Andromeda Crescent
East Tamaki
Auckland

P O Box 58 114
Auckland

Telephone: 274 7236

They stock a wide range of imported beekeeping equipment.

* Resene are now making a one pot vinyl butyral phenolic etch primer which is very good for steel, galvanised steel, aluminium, copper and its alloys, etc. It needs a top coat for prolonged exposure. The primer contains zinc chromate and iron oxide pigments so it is red in colour. It is touch dry in five minutes and hard in 15 minutes.

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NEW YEARS RESOLUTIONS

How about some new year's resolutions for 1985? Try these for size.

1. I will enjoy my bees more. This would not be too difficult. Hobbyist to commercial, every beekeeper should be able to spend some time observing bees in the hive, at an observation hive, and reading more about them in the many books written on various aspects of beekeeping. If your bee reading has been limited lately to journals, you may want to pick up a book on some aspect of beekeeping to learn more about these creatures.

Carry the book in the lunchbox, briefcase, or in the glove compartment of the truck - when you are waiting for someone, pull it out and read a few pages.

2. I will develop a better business plan for my bees. This applies to hobbyists or commercial beekeepers and more has been said about it elsewhere in these pages.

3. I will educate more people about bees and beekeeping. If the 6 500 beekeepers in New Zealand were to spend oneday each year educating the non-beekeeping public about bees, beekeeping honey and pollination there would be a tremendous rush of interest in these subjects.

Education can take place in many forms. Visit local community groups and talk about beekeeping. Meet with local producer organisations such as Federated Farmers or Fruitfed. Work as a beekeepers' association and put on displays at local shows. Visit a few classrooms and talk about bees.

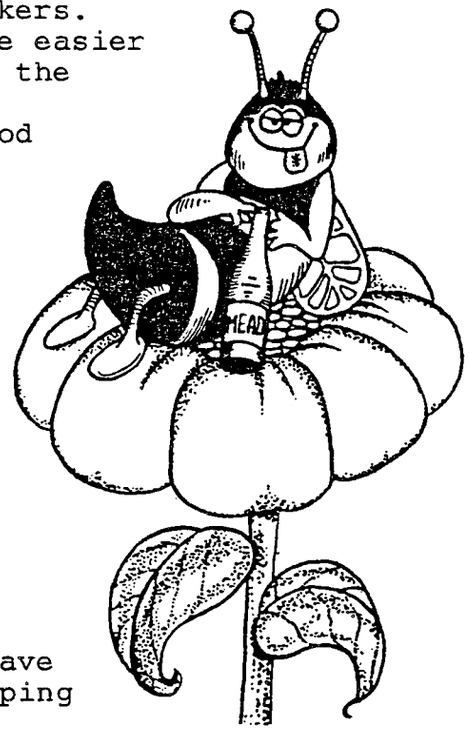
Adult groups are always looking for speakers. Good talks are hard to give, but they are easier given when the subject is of interest to the speaker - for a beekeeper, a talk about bees and honey should be easy. A few good visual aids will help.

4. I will become (more) active in the local beekeepers' association. Bee associations are the backbone of beekeeping in this country, and every beekeeper should be involved in their local organizations.

5. I will promote honey. This seems to fit into the 4 items mentioned above. And it seems to be a good way to end this list.

Happy New Year!

Acknowledgement: Some ideas used here have been taken from Connor, L. 1984. Beekeeping resolutions. *Speedy Bee* 13(1):13.




Happy New Year

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1985 DATES

While you're thinking of 1985, here's a couple of dates to note for Telford beekeeping courses:

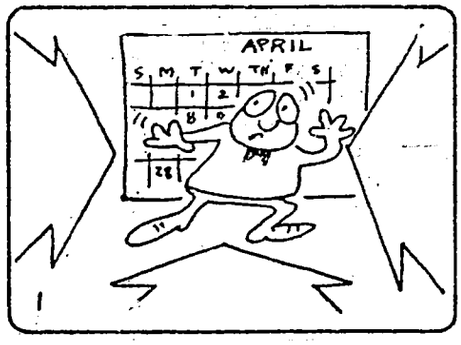
Queen rearing for commercial beekeepers. 5 - 8 March 1985.

Expanding into commercial beekeeping. 25 - 28 June 1985.

The courses start at 1 pm on the first date given, and finish at 12 noon on the last. Cost and other details will be given closer to the time.

If you wish to enrol for the queen course, it would pay to do so by the beginning of February. Enquiries to:

Telford Farm Training Institute
Private Bag
BALCLUTHA

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By the time you read this I'll be off overseas on leave. The main purpose of my going is to attend an international conference on tropical apiculture in Nairobi, Kenya. This is essentially a private trip, though the Ministry of Foreign Affairs is giving some assistance.

If I survive the experience of working hives of African bees, I'll tell you all about it when I get back!

A G Matheson
APICULTURAL ADVISORY OFFICER