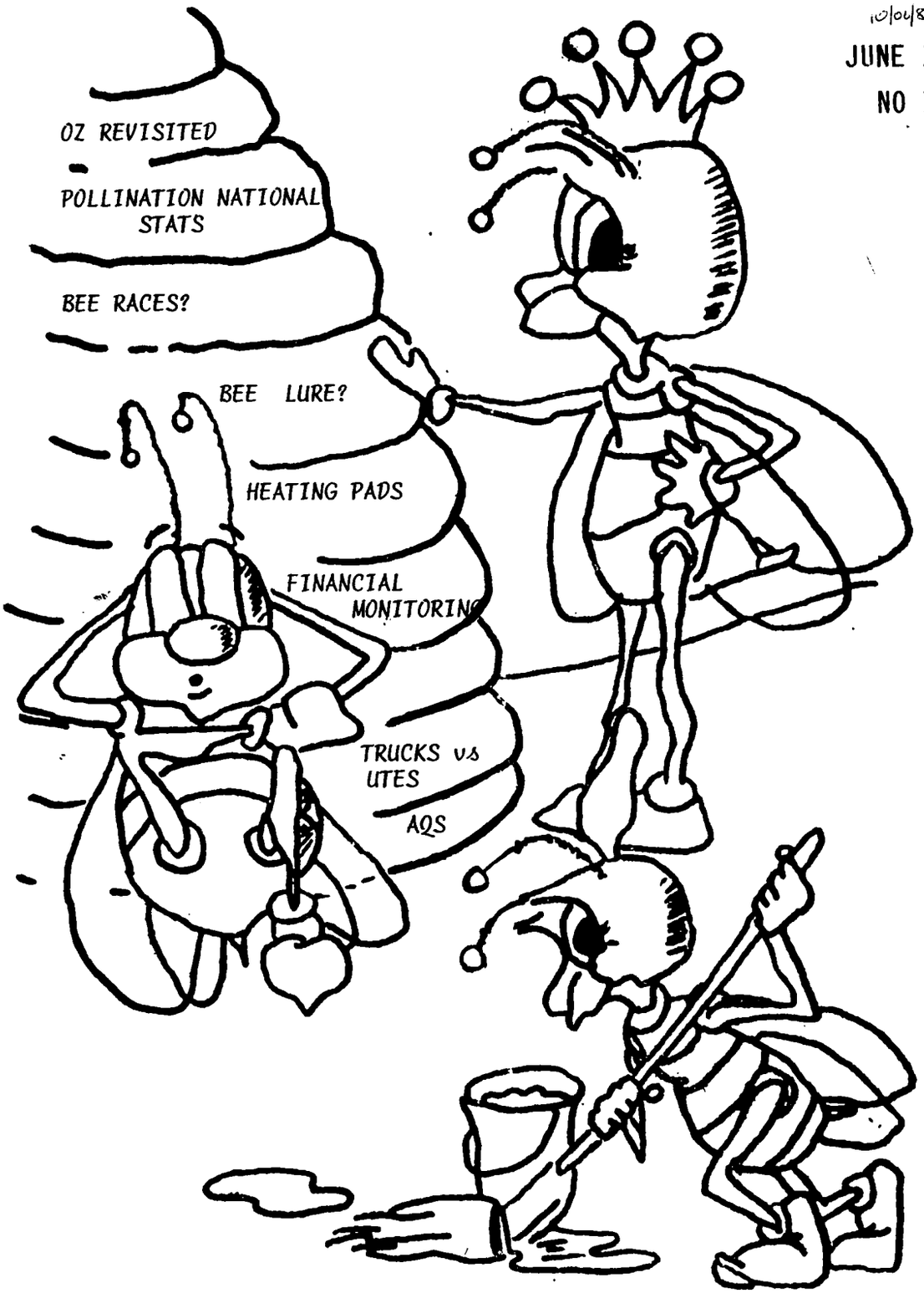
YOUR NEWSLETTER

10/04/86

JUNE 1986

NO 38



Ministry of Agriculture & Fisheries
Private Bag
Tauranga

Telephone: 82 069

T G Bryant
Apicultural Advisory Officer

Telephone: 65 962 Private

YOUR NEWSLETTER

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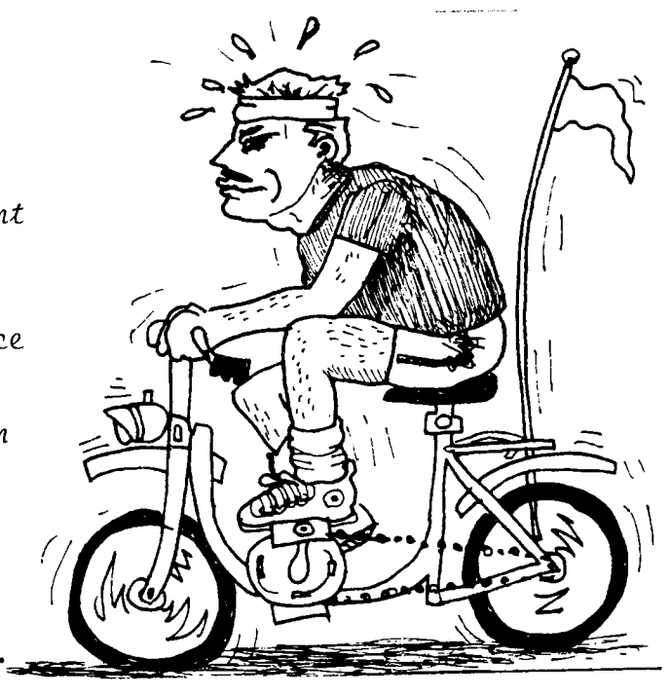
NO 38

Many of you are aware that Apicultural Advisors recently visited Australia (NSW) to have a look at what is happening there, and specifically to see and discuss the current state of the art regarding EFB.

Most of our time was spent in and around Sydney with scheduled visits to:-

* *The Honey Bee importation and quarantine facility at Wallgrave.*
* *A gamma radiation plant where equipment infected with AFB can be sterilised.*
* *The Honey Corp. of Australia packing plant at St Mary's.*
* *Hawkesbury Agricultural College to see their queen breeding and stock maintenance projects.*
* *Cretchen Wheen's queen breeding operation at Richmond.*
* *Pender Bros. Beekeeping Supplies factory at Maitland.*
* *Dr Michael Hornitsky's lab at the Veterinary Research Station at Glenfield.*
* *Social meeting with local beekeepers and an afternoon with NSW Advisers.*



Highlights for me were -

* Viewing the gamma radiation plant and being allowed into the core. The core was 'deactivated' by being lowered into a deep water pool where it could be seen glowing a not unattractive, eerie blue colour.

  Equipment is sterilised at a cost of $7.00 a super including frames, a side benefit of sterilising is a reported increase in colony production once colony is re-established. Apparently the cobalt rays kill all other bacteria, nosema, etc. at the same time.

* Spending a day with Dr Michael Hornitsky looking at EFB, making slides of EFB & AFB in his lab and viewing these under the microscopes, and a very frank, general discussion on the problems of EFB and the industry's, Department's attitude to this disease.

* Seeing EFB in the field, it was quite different from that which I had seen in Canada, USA and UK, I would have to wonder if the disease I saw in North America and according to themwas EFB, is in fact the same thing.

  Its effects on the colony in Australia are devastating and it is to be hoped that it never reaches New Zealand. As an aside, it could easily be confused visually with half moon disorder, and it is recommended that all suspicious brood disorders be properly diagnosed by MAF or Dr Dennis Anderson. It will be only by catching an exotic disease <u>early</u> that eradication will succeed.

* 'Bag in the box honey' sounds corny but true, an over-grown wine cask made of wood and steel on a pallet. The honey is put in a thick plastic bag liner with a honey gate supplied which when screwed into place pierced the bag, when empty the collapsible frame was returned for refilling. Used mainly by the manufacturing, bakery trade, it would also have application in bulk food barns.

There is much more, but in the interests of space I'll leave it there, a full report will be available shortly, all or part will be obtainable through the NBA to interested beekeepers. I shall also be reporting to local NBA branches.

<u>HIVE BUGS AND CREEPY CRAWLIES!</u>

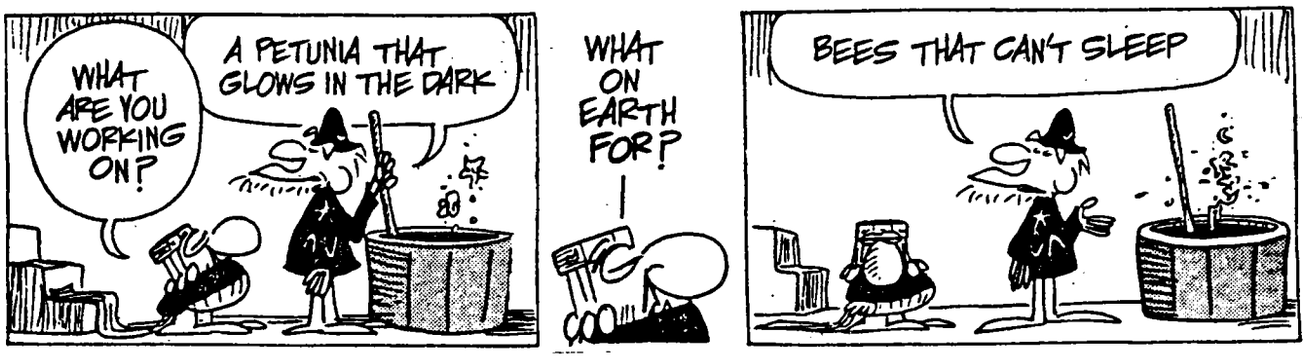
Some scientists in Russia found between 60-82 microorganisms per 100 cm^2 of hive surface. Many of these were bacteria, which along with viruses probably sit around as unapparent infections just waiting for the right conditions to cause problems. (Apiacta 1982 17 (3/4) 100-104.

<u>NATIONAL KIWIFRUIT POLLINATION STATISTICS (Compiled from records of AAOs by T Roberts, AAO Palmerston North)</u>

District	# of Hives	Gross $ Value
Northland	3 510	238 680
Auckland	3 728	205 040
Tauranga	30 999	2 140 000
Gisborne	3 620	188 240
Hamilton	1 053	63 180
S.North Island	3 355	201 300
Nelson	4 300	343 500
Total	50 565	$3 379 940

BEE LURE

Published unabridged are the results of a trial on the above product for your information and your own conclusions. (Attached)



INDUSTRY STATISTCIS

Hive Holdings	No. Beekeepers	No. Apiaries	No. Hives
0.5	476	552	1 043
6.5-	287	589	4 726
51.250	70	502	8 805
251.500	24	370	7 437
501.1000	12	394	8 811
1001 plus	12	1 254	22 638
Total	**881**	**3 661**	**53 460** (48 329)

SITUATIONS VACANT

Beekeeper required for coming season, experienced or keen to learn. Apply Alan Murray, Box 320, Opotiki, Phone 1038D.

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TRADE TABLE

* NEW HEATING PAD : FLEXIBLE CARBON SHEET HEAT GENERATING MATERIAL:

The basis of the heating element is the use of an impregnated carbon cloth laminated between two layers of heat resistant polyvinyl chloride providing durability, flexibility and softness. Its uses are only limited to your imagination.

Main features are that it gives a 100% even heat spread as heat radiates from all its surface. Test results show a 30% reduction in electricity costs, due to total heat generating area and the emission of infra red rays.

Standard pads are in four widths, 40 cm, 55 cm, 85 cm and 100 cm, and in lengths 2.4 and 3 metres. Other lengths up to 3 m can be custom built to order. Pads can be purchased individually.

A solid state controller accurate to $\frac{1}{4}$°C is manufactured and available at a very reasonable cost.

Available from Mr G Muir, Mirage Industries Ltd,
P O Box 51-518
Pakuranga, AUCKLAND. Phone 56 257

NOTE: *Although I haven't fully investigated this product, it may be just the thing for wrapping around honey drums to be melted out, can be used as floor heating in the home, carpet and mat heating, tanks and pipes, saunas, car seat, water bed, innersprung beds, concrete curing. SO WHY NOT HONEY!!*

APRIL FOOLS JOKE OR SPRING FEVER? *SOURCE: THE BEEKEEPERS BULLETIN 1985 (3) 6*

I've had this clipping for a while and still don't know what to make of it.

BEE RACES 1984

WELL IT'S the beginning of April again and time to plan for this year's bee races. Incidently, we were very pleased to see so many observers arrive from fellow associations to witness our revival of this medieval sport.

'Tis written that even Henry VIII, when corpulence and sore leggies got the better of him, became a regular and avid spectator of the sport.

Two members of the association will act as judges, one at the releasing point two miles from the competitor's hive. The other by the hive, stop watch at the ready, and for those of you who have not competed before a reminder of the rules.

The Bee Races are conducted by the West Cornwall BKA.

Each racing bee is checked for fitness, is then marked and released at a pre-determined time by the first judge. The Runner will then follow the bee and award a small number of penalty points every time it stops for pollen or nectar. And a large number of points when it flies over open water. Finally, the second judge will clock the marked bee into the hive.

As usual the event will take place during the month of June and obviously anyone living outside the area would find it impossible to compete, but if you would like to watch with a view to introducing bee racing to your own association, please contact the WCBKA secretary. Incidently, a new rule recently introduced by the BBKA reads as follows; Any competing bee thought to be even attempting to sting the runner or the two judges, will be deemed to be automatically disqualified.

ANDREW REEVE

British Bee Journal April 1982

* *

BEESWAX

The market for beeswax is reported as being weak by one major exporter. Stocks are high overseas, this may be due to a poor Northern Hemisphere honey crop as beekeeprs (if the NZ situation can be used as a guide) supplement their income by quitting their wax stocks.

Current returns to the beekeepr (NZ) are down in real terms by one third of what they were 5 years ago.

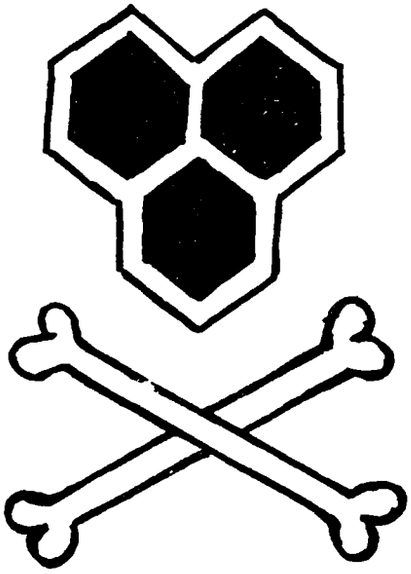
Quotations	Lemon	$4 940	FOB/tonne
	Dark	$4 040	FOB/tonne

***** **************** *** **

THE EFFECT OF PARADICHLOROBENZENE (PDB) ON HONEY BEES

(The Beekeepers Bulletin 1985 3 (6) 11)

Paradichlorobenzene (PDB) is often used for controlling wax moths in stored combs. It is effective in killing and repelling moths attracted to honey bee comb, clothing and other items. About 85 g or four tablespoonsfull are used for a stack of five full-depth supers of empty comb. Don't use it on combs containing honey for human consumption.



Damage to bees by PDB has been reported in Germany so we should know how damage occurs and how to avoid it. G. Vorwohl found that bees exposed directly to crystals of the chemical became restless, fell into a stupor, and died after several hours. When removed from fumes before death, the bees recovered. A solution of PDB, honey and water did not cause any abnormal losses, apparently because the chemical was not soluble in the solution and the crystals were filtered out before the test.

Bees caged on a comb which had been gassed for 20 hours with PDB were badly paralysed in 45 minutes. About one quarter of a group of new bees put on the comb an hour later were also paralysed or killed. Bees put on the comb 3½ hours from the start of the experiment remained healthy but tended to move away from the comb.

Paradichlorobenzene residue in combs stored at room temperature (20°C) or above is nearly all dissipated in three hours, completely in 24 hours. At lower storage temperatures, gas residues in comb may be sufficiently strong to kill bees after 24 hours of airing.

To be safe when using PDB for comb fumigation, air all combs in a warm environment for 3 to 48 hours. The longer period is best for combs gassed and stored at temperatures below freezing. In general, combs are safe for bees when you can no longer smell any odour of PDB in them.

Source: Jaycox, E R 1984. The Newsletter on Beekeeping 1 (3) : 3.

THE DISEASE SITUATION (AFB)

No. of hives diseased found by MAF	175* (436)
No. of hives diseased reported by beekeepers	291 (230)
Total number of diseased hives	466 (676)
% of district total	0.87 (1.41)

* 1985 in ( )

I do not wish to appear offhand nor appear complacent, disease is not to be treated lightly and the widespread nature of the problem is very worrying, but I urge you all to read and re-read the following.

OVERREACTION TO DISEASES OF BEES *(THE BEEKEEPERS BULLETIN 1985 3 (6) 12-13)*

An old problem that keeps recurring in beekeeping is the exaggerated concern for the danger of spreading bee diseases, particularly American Foulbrood (AFB), our most serious brood disease. The problem shows itself in two ways: 1) Attacks on bee inspectors, who are accused of not being careful enough in handling diseased colonies, and 2) Suggestions to beekeepers that they must sterilize themselves and the environment around them after any contact with an AFB-infected colony of bees.

Let's consider some of the unrealistic proposals we hear from people who create the problem, and then look at a few reasons why a careful, but moderate, approach to handling bee diseases is adequate to keep from spreading them.

Not long ago I read an article in which the author listed all the things you must do after having any contact with a colony infected with American foulbrood. There were so many precautions I don't remember them all, but I was impressed by the recommendation that you give the bellows of your smoker several coats of varnish. Also, if you leaned a comb, any comb, against your trouser leg, you must treat your clothes with a strong bleach such as Clorox.

Complaints against inspectors are based on similar thinking. Some beekeepers believe that the inspector should change clothing, take a lye or alcohol bath, and perform other rituals after encountering a colony with AFB while inspecting. Anything less is sure to spread disease, according to those experts.

If American Foulbrood were as infectious and contagious as some people would have you believe, it would take our bees as the plague took people in the old days in Europe. Fortunately, there are natural constraints on the spread of AFB and, without human interference the disease does not spread easily in a population of honey bee colonies. Perhaps the greatest constraint is the need for disease spores to reach the food of young, susceptible larvae, not just the hive or just any bee in the hive, to cause infection. Good housecleaning by infected colonies, and other mechanisms of resistance in individual adult and larval bees, further reduce the spread of AFB.

Scientists doing research with bee diseases have found that colonies do not become readily infected with American foulbrood, even when they have been given sugar syrup containing large numbers of disease spores. They have also reported that routine examination of diseased and healthy colonies in the same apiary did not spread the infection.

Disease is spread most commonly by lack of inspection by individual beekeepers and their failure to recognise the disease or its presence. These errors and

omissions lead beekeepers to transfer combs containing disease, to divide diseased colonies, and to extract honey from diseased colonies. These are the primary means of spreading infection, not the smoker, clothing, gloves, etc, of the beekeeper or bee inspector.

(Read that last paragraph again!)

Beekeepers and inspectors should always take a few simple precautions after handling a colony infected with American Foulbrood:

1. *Scour and flame the hive tool*
2. *Wash your hands*
3. *Wash or change gloves if you are wearing them*
4. *Scrape and rinse off the bellows of the smoker, and*
5. *Make sure that any spilt honey is cleaned up or well-covered with soil.*

¶¶¶¶¶¶¶¶¶¶

FINANCIAL MONITORING - BEEKEEPING

A synopsis of the data collated from information provided by 15 beekeepers is attached. By using your calculator and working out the cost/returns per hive you can compare these figures to see how you are performing. These are cash figures so do not include depreciation, stocks etc.

PRICE CUTTING

Kamikaze Approach to Pricing (J Winkler) as reported in Management May 1986/7.)

Snippets: 'PRICING DECISIONS HAVE A GREATER IMPACT ON BUSINESS PROFITABILITY THAN ANY OTHER FACTOR. YET MOST MANAGERS HAVE ONLY AN ELEMENTARY GRASP OF PRICING MECHANISMS AND HAVE AN OUTDATED APPROACH TO PRICING POLICY.

PAYING SCRUPULOUS ATTENTION TO PRICES AND MARGINS IS THE BEST TREATMENT FOR AILING COMPANY PROFITS. MAJOR SURGERY IS MORE DRAMATIC BUT LESS EFFECTIVE, AND OFTEN THE PATIENT DOESN'T SURVIVE THE OPERATION!

TO PROVE THE POINT, AT A RECENT SEMINAR, COMPANY DIRECTORS, MARKETING MANAGERS AND SALES PEOPLE WERE ASKED - TO CALCULATE THE EFFECT ON THEIR COMPANY PROFITS OF A SIMULTANEOUS 1% INCREASE IN BOTH SALES AND PRICES, AND A 1% REDUCTION IN COSTS. RESULTS RANGED FROM 20-40% INCREASES:- NET PROFITS.

WINKLER'S SUMMARY - PRICE CUTTING IS BAD BUSINESS, THE PRACTICE IS GETTING COMPANIES AIRBORNE AND WINGING THEIR WAY TO SELF DESTRUCTION.

"Hey! I can feel it — we're turning around."

NOTE. *DOES THIS DESCRIBE THE LOCAL HONEY MARKET SCENE OVER THE LAST FEW YEARS, HOW ABOUT OUR EXPORT MARKETING!!*

LIGHT TRUCKS COMPETE FAVOURABLY WITH BEEKEEPER UTE

(NZ Farmer,April 24 1986 107 (8), 32-33

Prices of 1.5 to 3 tonne trucks range up to $33,000, for the luxurious double cab model most fall within the $18000 to $25000 bracket (does not include decks).

A typical ute will be in the range $18 000 to $20 000 range, 4 x 4 vehicles $16 000 to more than $60 000.

Conclusion, light trucks are competitive, are cost effective by comparison, will give up to 200 000 km trouble free running, comfortable with greater load capacity, and the choice of light trucks is a viable alternative to traditional farm utilities.

¶¶¶¶¶¶¶¶¶¶

HIVE COSMETICS (GLEANINGS IN BEE CULTURE OCTOBER 1985)

SPOIL YOUR WIFE, SOFTEN YOUR HANDS OR HAVE THE LOTION PREPARED AS A GIFT

Honey-Rosewater Hand Lotion

1 Tablespoon Irish Moss
¼ cup rose water
¼ cup honey
½ cup water
1/3 cup gylcerine

Combine the water and Irish Moss, simmer over low heat until the mixture is thick (about 10 minutes). Strain the mixture and remove the Irish moss. Combine the strained liquid with the remaining ingredients. Makes about one cup.

####################

Actually, I'm no longer a wage worker.

I'm a Pollination Consultant.

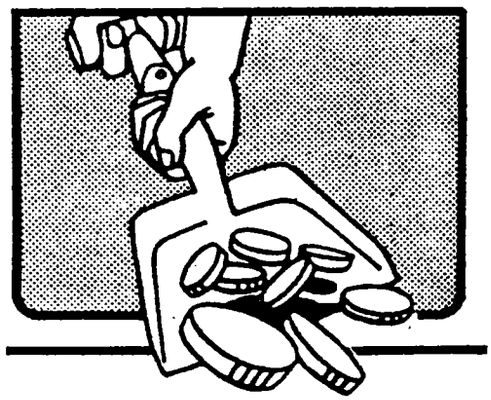
NEW AGLINK

HONEY BEES. POLLINATION OF CROPS, ECONOMIC SIGNIFICANCE AND MANAGEMENT. FPP.860

Describes the pollination process, pollinating insects, the honey bee and recommends standards , crops requiring pollination and recommends numbers hives/ha for that crop, and suggests practices to improve crop pollination.

* * * * * * *

NEW TRUCK LOADING CODE



From 1 February this year the MOT is enforcing a new loading code for truck drivers.

The maximum fine is $2000. For a copy of the code (recommended to all owners) send $9.95 plus $1.05 P & P to mail orders, Government Printing Office, Private Bag, Wellington, and ask for 'Truck Loading Code'.

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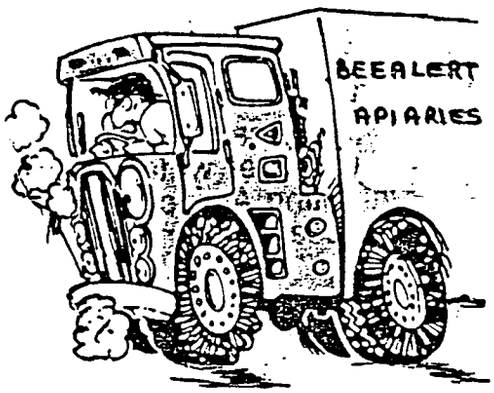


Every pollination season several beehives are picked up on the side of the road and it is not uncommon to find lids, supers, etc. on the sides of roads. We always receive complaints from garage proprietors et al about beekeepers leaving bees behind.

In all cases loads cannot have been very secure and the inconvenience to the public is not conducive to good public relations. Please be more considerate.

* * * * * * * * *

G.S.T.

Have you registered yet, do so quickly but before signing away your life have a talk to your accountant and work out which of the reconciliation timetables are going to suit <u>you</u> best.

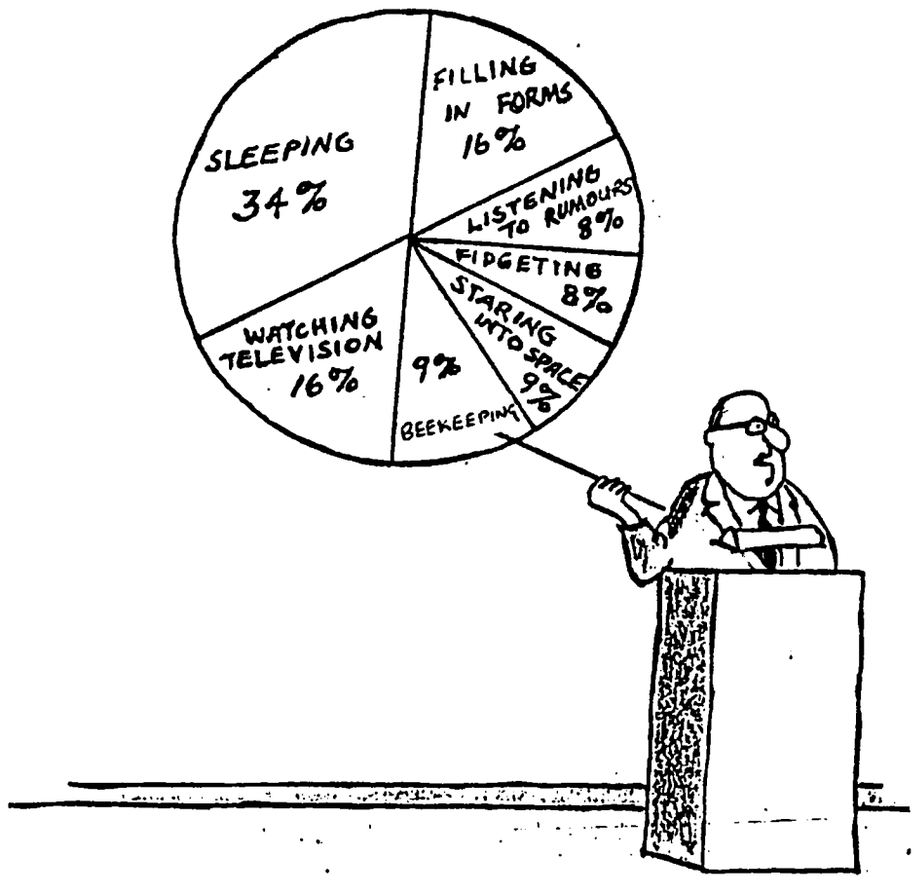
To register go to the GST Division of IRD (ring and find out where it is) not the usual IRD office. In Tauranga the office is in the old Labour Department building in Grey Street (Opposite Wright Cars).

* PRESIDENT OF NBA, IAN BERRY, IS NOT STANDING FOR THE PRESIDENCY THIS YEAR, ALL BEEKEEPERS NEED TO GIVE CAREFUL THOUGHT TO FILL THIS POST, ONE WHICH IS A RATHER THANKLESS TASK AND INVOLVES A LOT OF PERSONAL SACRIFICE.

* ALLIANCE BEE SUPPLIES IS TO WIND UP AT THE END OF THE YEAR. KEVIN ECROYD TELLS ME HE HAS ATTENDED 35 CONSECUTIVE INDUSTRY CONFERENCES, QUITE A RECORD. I'M SURE EVERYONE WISHES KEVIN WELL IN HIS CHANGE OF DIRECTION.

* MAF FOUND AFB IN POLLINATION HIVES LAST YEAR IN GISBORNE AND TE PUKE. IT WOULD BE GOOD PRACTICE TO MARK YOUR HIVES AND KEEP GOOD RECORDS OF WHERE HIVES GO JUST IN CASE YOU HAVE TO DO A TRACE BACK OPERATION.

To estimate the time it takes to do a task: estimate the time you think it should take, multiply by two, and change the unit of measure to the next highest unit. Thus we allocate two days for a one hour task.



"I'd like to address my remarks to this portion of our day—the 9 percent of our time that we spend working."

That's all from me for now, hve a relaxing winter, see you at Okoriore and Conference.

Trevor

THIS NEWSLETTER IS SPONSORED BY:-

MONITORING REPORT -SUMMARY

TAURANGA APIARY DISTRICT

DATE: 5.5.86

ACTUAL YEAR: 85/86

PROJECTED YEAR: 86/87

	POLLINATOR BEEKEEPER		HONEY PRODUCER		DEVELOPING BEEKEEPER	
	Actual	Proj.	Actual	Proj.	Actual	Proj.
Total Hives	1080	1250	850	900	520	650
Total Producing Hives	950	1200	825	875	475	620
Labour Employed (Weeks)	86	90	30	35	18	18
Servicing Rounds	11	11	9	8	11	11
Total Kilometers	41580	42000	35000	35000	21000	21000
Honey Production (+/100 hives)	1.59	1.68	4	4	2.3	2.3
Pollination HIves	1052	950	220	240	422	506
Income						
Honey & Wax	43120	51376	54992	59216	14551	26250
Pollination	79920	74100	14300	16320	27852	34408
Other (Beekeeping)	5400	3700	555	575	1303	1200
Gross Cash Income	128440	129176	69847	76111	43706	61858
Expenses						
Crop	12399	9120	3205	3170	7115	4150
Processing/marketing	12106	9116	4274	5753	2899	3877
Wages	18955	20850	7837	10064	4459	4800
Vehicle	10177	10072	8755	9118	6742	7152
Administration	5798	5748	3718	4300	2612	2954
Repairs & Maintenance	4255	4500	3073	3570	1617	1700
Gross Cash Expenses	63690	59406	30250	36551	25444	24633
Net Cash Income	64750	69770	39597	39560	18262	37225
Less Drawings	15551	16684	12567	14383	9040	9449
Taxation	6263	10544	8364	13511	-	3090
Financial Charges	16546	18481	9787	9787	11213	10744
Total	38360	45709	30718	37681	20253	23283
Surplus for Ploughback	26390	24061	8879	1879	-1991	13942
Less Development	16755		1313	2500	7693	6500
Capital Purchase	8840	10200			3213	4200
Total	25595	10200	1313	2500	10906	10700
Plus New Borrowing	10514				8905	-
Cash Balance	11309	13309	7566	-621	-3992	3242

Bayer New Zealand Ltd.

BEE LURE (1983).

This season several block trials were carried out in order to gain more information on the result of applying Bee Lure to Kiwifruit. A questionnaire was also sent out to users of Bee Lure to guage the commercial acceptance of the product.

The results of the trials and questionnaire can be summarised as follows:

TRIAL A:

Locality:	Kerikeri
Age of Vines:	3 years trained on Pergola
Size of Trial Area:	Untreated: 127 Vines Treated: 114 Vines
Application Details:	Bee Lure applied as a special spray at a rate of 10 litres/ha at early blossom and again at Full blossom.
Hive Details:	No hives were placed in the orchard. Fifty hives located on the neighbour's property.
Harvest Details:	Fruit picked on 19 May and packed at Keri Packhouse. Records kept of fruit size/tray numbers and weight of reject fruit.

RESULTS

Fruit Count	No. of Trays		Increase Bee Lure cf Untreated
	Untreated	Bee Lure	
25	77	99	
27	21	136	
30	238	355	
33	355	359	
36	231	488	
39	116	181	
42	140	143	
46	170	91	
Total Trays	1348	1852	37%
Mean Tray/Vine	10.6	16.2	53%
Tot. Fruit (Export)	47887	63463	32.5%
Mean Fruit/Vine	377	556	47.6%
Reject Fruit (Kg)	2000	1515	(-24)%

TRIAL B:

Locality:	Te Puke
Age of Vines:	Established
Size of Trial Area:	Block treated 6 vines left untreated 4 vines each area assessed
Application Details:	Bee Lure applied at 16.5 litres/ha on November 18 and November 24. First blossom on female vines open on November 13.
Hive Details:	24 hives placed in block (0.9ha) on November 16 with a further 26 hives placed in block on November 24.
Harvest Details:	Fruit harvested by MAF on May 24 and classified as No. of fruit - export and process; Average weight; No. of trays. Fruit was also stored until 20 July to check on storage rots.

RESULTS

Factor Assessed (4 vines/area)		Untreated	Bee Lure	Difference Bee Lure cf Untreated
Fruit No.:	Total	6317	7461	+ 18.1%
" "	Mean/vine	1579	1865	
" "	Export	4024	4772	+ 18.6%
" "	Mean/vine	1006	1193	
Trays:	Total	147.2	176.7	+ 20.4%
"	Mean/vine	36.8	44.2	
"	Export	114.4	138.4	+ 20.9%
"	Mean/vine	28.6	34.6	

Bee Activity: Bee activity was observed on 18 November after Bee Lure application by Dr Cameron Jay and another observer The results of their observations were:

Bees observed visiting vines (Time span not recorded)

	Untreated	Bee Lure	Diff.
Observer 1	23	39	
Observer 2	12	22	
TOTAL	35	61	+ 74%

The fruit stored for 8 weeks showed no botrytis or other rots in treated or control samples.

Other block trials showed only a slight increase in fruit numbers but detailed tray counts were not kept.

QUESTIONNAIRE:

A questionnaire was sent out to growers who had purchased Bee Lure. This was to be filled in by growers prior to harvest as an indication was required to assist in planning for the coming season.

Distribution of Questionnaire: Kerikeri/ Auckland/ Bay of Plenty/ Hawkes Bay/ Nelson

Response: 55%

Growing System:	Pergola	T Bar
	41%	58%
Increase In Observed Bee Activity/numbers	60%	35%
Will Use Bee Lure Again	60%	43%
Require More Information	20%	24%
Will Not Use Bee Lure	20%	38%

Several respondents indicated that it was difficult to assess any difference as the season in some areas was ideal for pollination.

It is also difficult to visually assess fruit size on the vine and grading would show up any differences.

SUMMARY:

The trial results and the questionnaire show that Bee Lure appears to provide a benefit in increased fruit set resulting in an increased yield per given area. This will be evaluated again this season.

It is acknowledged that weather conditions and bee placement within the orchard may result in similar increases but no figures on this are available.

M: HELENA BEE LURE

Three growers were supplied with samples of Bee Lure prior to blossom of kiwifruit last year.

Mr. Clarke used Bee Lure the previous year with good results. This season due to the good weather he didn't apply it.

Mr. J. Hall compared Bee Lure to BP's Bee Line. He felt the bees were going crazy when spoken to in December. At harvest he felt it hadn't worked as there was no improvement in fruit size compared to last year. He sprayed an area that is in a hollow and had a previous history of poor fruit size. Is not impressed with Bee's anyway and will be using hand pollination next year.

Mr. R. Amrein, Busby Road, Katikati.
The manager Mr. Dexter Sherwood was supplied with enough product to apply 2 sprays to a 1 acre block.

Two adjacent blocks of 11 - 12 year old vines were compared. Both blocks have a similar aspect and had produced similar quantities of fruit last season. Both blocks were 1 acre in size.

Block 1: Had Bee Lure applied at 2.5 US gal/acre (9.5 l) on two occasions at full blossom. The second spray was 3 - 4 days after the first and was applied after rain. General conditions at blossom were good for bee activity compared to other years.

Block 2: No Bee Lure applied.

Both blocks were treated the same throughout the season.

Hive placement did not favour either block.

Both blocks were harvested on 5-5-82 and checked in the packing house.

Block 1: Produced 1 extra bin of fruit compared to Block 2.

After grading 1700 trays of export fruit packed with the majority of the fruit being in the 36, 33 and 30 count.

Fruit rejected as being too small filled a bushel case.

Block 2: After grading 1635 trays of export fruit packed with the majority of fruit in the 36, 39 and smaller counts.

Fruit rejected as being too small filled 3.5 bushel cases.

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In summary, "Bee Lure" applied twice has:
1) Produced more fruit
2) Given a size shift of 5 - 10% towards bigger fruit
3) As a result of 2 meant less fruit was rejected for export on account of being too small.

On 1981 prices of $8.30 per tray the returns equate to $539.50 extra per acre. This in a good year for bees!

Mr. Sherwood intends to purchase Bee Lure next year and do other blocks as a similar trial, as he is so impressed with these results.

R.W. PRINCE.