

NO. ~~19~~ 20

May 1984

**waikato
bee
notes**

- * Weevils on nodding thistles
- * Spray guard rain flaps
- * Drum liners - Rheems
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BEFORE I SAY ANYTHING I'D.
LIKE TO MAKE A
SPEECH.



NOT A HONEY OF A SEASON!

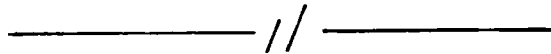
Well, my crop prediction back in August did turn out right - unfortunately. We didn't get the winds of last season but January was colder than average.

I haven't got a district crop figure for you yet but every time I get some more statistics in, my figures are reduced. I'm down to a 700 tonne crop for the Waikato at the moment and it may well go lower.

If you're thinking of selling more hives as one way out of a financial straight jacket, you must obtain a permit from myself to do so. I will most likely give you a single permit but ask you to record names and addresses of all purchasers.

DISEASE SITUATION

Beekeepers reported 83 BL hives to me last year and my inspectors found another 57, for a grand total of 140 hives or 0.34%. This is below the national average of 0.5% for hives. I'm very pleased with this but there is always room for improvement.



THISTLES - GOOD NEWS OR BAD NEWS?

The bad news for Waikato beekeepers is that the noddies didn't yield much nectar this year. In fact, some beekeepers who trucked hives down country would have been better leaving them on site. I have no magic formula for predicting whether noddies will yield or not - nor does anyone else that I know.

The "good" news is that the weevil is not having much effect on thistle populations in Hawkes Bay at least. On-farm studies there over the past two seasons have shown heavy weevil populations in October/November and little seed production. However, by February only a small proportion of thistle heads were affected and many viable seeds were being produced.

The conclusion was that appropriate control measures would still be required especially from December onwards (Situation Report No. 9, March 1984).

Two of our members recently attended a nodding thistle field day on a government block. Fortunately they weren't asked to identify themselves, (despite inquisitive stares from the farmers), as the discussion got quite emotive at times; understandable really when the noddies were over their heads!



KIWI JOKES GOING AROUND OZ!

- *"How do you set up a kiwi in a small business?"
"Give him a large business and wait!"*
- *"What is the difference between a Kiwi and ET?"
"ET went home!"*

oooOooo

"SPRAY GUARD" RAIN FLAPS

These flaps for trucks trap and drain 400% more water than regular rubber flaps. Wheel spray is reduced by 50-60% which in turn reduces road mess on windows and mirrors and stone chip damage.

These revolutionary flaps have a dense woven pile on one side. They are available from Wormald, 26 King Street, Frankton; Paramount Recaps Ltd, Te Rapa or Dunlop Tyre branches. And the price - the latest I have are as follows:

600 mm x 915 mm	\$40.54 each
600 mm x 702 mm	\$33.75 each
1220 mm x 152 mm	Side strips \$13.51 each

DRUM LINERS

These new polyethylene and nylon liners are made by Rheems Ltd. They're a bit pricy at around \$7 - \$8 each (and there's 20 in a pack) but they enable you to use a cheaper or recycled drum, either closed or open-mouth type.

The liner is fitted inside the drum and inflated with compressed air. Once the plastic bag is pushed against the drum walls it will stay there due to a partial vacuum being created.

I saw Canadian beekeepers using something similar a number of years ago. They had rolls of lightweight plastic tubes. They tied a knot in one end, placed the "bag" into the drum, filled it up with honey then tied a knot in the top. Cheap and simple. The beekeepers loved this system but the packers hated it, as you can imagine. The liners from Rheems are a much tougher and heavier grade of plastic.

oooOooo

"Because people are fallible they will make mistakes and we therefore try to make systems foolproof: we fail for two reasons -

- * It is impossible to make anything foolproof because fools are so ingenious.*
- * Build a system that even a fool can use and only a fool will want to use it."*

Anon

TANALIZED TIMBER (Sitting on the fence)

I've warned you on a number of occasions about using tanalized timber and plywood where bees have access to the treated timber (Newsletter No 5 Aug 79 & No 3 Nov 78).

However, in discussions on the subject I am frequently confronted with, "But so-and-so uses tanalized floors (or boxes) and they don't have any problems". And I have to admit that I have seen properly protected timber used successfully with no apparent harm being caused to the bees.

Well, how do they do it? In all this remember it is the arsenic salts that kill the bees and the bees take these off the surface of the timber. So protection principles rely on stopping these salts leeching to the surface of the timber and/or removing them once they are there.

This is the recommended procedure (by beekeepers who insist on using tanalized timber). The timber must be thoroughly dry. This usually means fillet stacking and leaving it for 9-12 months. During this drying process arsenic salts will leech to the surface.

The next step is to dress the timber which removes these surface salts. Lastly the timber needs water-proofing to stop these salts coming to the surface again.

If you are protecting floorboards coat the surface only. The timber must be free to breathe through the lower surface. Thick layers of cool paraffin wax have been used successfully but I prefer a paint system which must be done thoroughly and carefully, especially for boxes.

Here's the recipe for boxes. Paint the inside with a lead free primer, an undercoat and a top coat. All these must be oil based. The outside of the boxes can be stained or left au natural or if you want to paint you must use a water based paint. The impervious oil based systems stop arsenic salts leeching to the inside of the boxes where bees could take them up with condensation moisture. The water based external paint can breathe and allow internal timber moisture to move to the outside if necessary.



The surface of floorboards should be painted with the oil based systems as for the inside of boxes. This must be done thoroughly. Don't paint the underside of floorboards.

Having said all this I'm still not very happy with tanalized timber for floors or boxes because I know someone won't protect the timber properly and will lose bees. There are alternatives which are nearly as good if used properly, such as Metalex, Tricunol and Woodlife II. I've mentioned these in past newsletters viz No 7 (February 1980), No 15 (May 1982).

Remember tanalized or Tanalith is a trade name that has come to be used for all treated timber containing copper - chrome - arsenic chemicals. Other treatments also contain these chemicals in one formula or another. Some of these are Supatimber or K33, Boliden, Celcure, Hager, Bolit, Immutan and Osmosar.

YOU KNOW IT'S GOING TO BE ONE OF THOSE DAYS
WHEN ...

- ... you wake up face down on the pavement.
- ... you put your bra on backwards and it fits better!
- ... you call suicide prevention and they put you on hold.
- ... your birthday cake collapses under the weight of the candles.
- ... you meet a New Zealand TV camera crew in your driveway on your return home.
- ... your twin brother forgot your birthday.
- ... your income tax cheque bounces.



BEE-KEEPER AND ASSISTANT
COLLECTING A SWARM.

WINTER READING

1. International Bee Research Association: IBRA

Most of you know that Trevor Bryant, AAO, MAF, Tauranga is the New Zealand representative for the IBRA. You will have seen some of the range of books and other educational aids Trevor can get for you from the IBRA. So if you're stuck for ideas on birthday or Christmas presents for the beekeeper in your life, contact Trevor.

2. "Speedy Bee"

This is an excellent little monthly newsletter cum magazine from the US with up to the minute news for the commercial beekeeper. It is full of political comment, marketing news and analyses and articles from other countries.

Write to: The Speedy Bee
PO Box 998
Jesup
Georgia 31545
USA

Subs are US \$15.00 for 12 issues.

3. "Honey Market News"

This is a monthly summary of market conditions mainly in the USA but also around the world. You'll find prices to beekeepers, prices and volumes of imported and exported honey, wholesale and retail prices, pollination rentals, the bees wax market and activities of the USDA Commodity Credit Corporation.

The price is US \$20.00 per year.

Payments should be sent to: Federal State Market News Service
1220 N Street
Sacramento
California 95814
USA



LET US SPRAY

Some where, some time, somebody, wrote an article on the benefits of spraying weeds around beehives. But this someone can't find it! Anyway, I seem to recall the researcher proved weed control was economic in terms of increased honey production. Basically the foraging bees made more trips per day because they didn't have to scramble through dense herbage. Walking and crawling are very energy demanding processes for bees.

Grass control increases the life of floor boards and the bottom brood boxes. It also reduces stock pressure on hives and fences around apiaries and creates more pleasant working conditions and drier hives which must reduce nosema levels. Lastly, I feel there is our professional image to uphold. If I was a farmer trying to keep a weed free and tidy farm, I would be "disturbed" if my beekeeper had an apiary that disappeared amongst metre high grass, weeds and thistles!

The best method for good grass/weed control is to use Paraquat, Preeglone, Roundup or a slasher to remove or kill the grass. Once bare ground is visible spray with a long term residual herbicide such as Phytazol, Weedex, Hyvar X, Prefix, Casoron, Permazol or Zylem. Some of these commercial brands contain more than one herbicide and if done properly you should get 1-2 years control. Roundup or Paraquat will only give 2-5 months control before new seeds germinate. It may pay to check with your farmer first before using any long term herbicide.

Blackberry and gorse are easily killed with chemicals containing 2-4-5T such as Tordon Brush Killer. A stirrup pump or air pressure sprayer is adequate for most situations. Write "herbicides" on your sprayer and keep it for that purpose only. Some of the long term herbicides are available in granular form and these are certainly easy to use eg Prefix, Casoron and Hyvar X. If you can't afford herbicides then dessicant or burning agents could be used such as salt, diesel or old sump oil.

Most herbicides are non-toxic to bees unless you drown them in it. However, reasonable care should still be taken.

If you've washed your sprayer after using 2-4-5T or any other residual herbicide be careful where you tip the washing water. I've killed a very large pepper tree, and barberry and hebe shrubs with washing water tipped down a storm water gully trap. The tile drain from the gully trap went past these trees as I discovered to my cost.

DISCLAIMER

Mention of any brand names does not necessarily imply endorsement of these products over others not mentioned.

POLLEN SUBSTITUTES

Man does not live by bread alone, nor do bees live on honey or sugar syrup alone; they need protein too and lots of it. I know some beekeepers don't mind their hives becoming short of pollen as the subsequent reduction in brood is a means of swarm control - in their opinion anyway. Nuclei and single storey colonies are at the greatest risk from spring pollen shortages.

I still can't persuade many beekeepers to plan ahead and trap and freeze pollen for feeding back to their colonies. We have several substitutes that we can use but all benefit from having natural pollen in the mixture too. It's not necessarily a nutritional thing but rather to do with phagostimulation. Bees are creatures of instinct and respond to chemicals, and there are chemicals in natural pollen that make the bees eat it. One such chemical is actadeca-trans 2, cis-9, cis-12 trienoic acid in case you are interested!

Anyway, back to the substitutes. There are three types available in New Zealand and suitable for bees.

(a) Soyabean Flour (SBF)

For bees this must be low fat (4-6%) achieved by a process called the expeller process. It may be difficult or impossible to buy expeller processed SBF these days. However, a suitable alternative is F-200 defatted soyaflour obtainable from AM Satterthwaite and Co Ltd, 203 Hereford Street, Christchurch, Phone 796-130, price \$1.50 - \$1.70/kg depending on quantity. This product really needs pollen added to it to increase its attractiveness to bees.

If no pollen is available try Archer Daniel's Toasted Nutrisoy T-6 available from TJ Edmonds Ltd, PO Box 472, Christchurch, Phone 893-189, price \$2.05/kg.

Healtheries Auckland may also have supplies of these products.

Recipies Using Soyaflour

1 part pollen (For 'parts' use kg, bags, or
4 parts soyaflour buckets or whatever measure
7 parts sugar you wish.)
3-4 parts water

Mix pollen in a small amount of warm water and stand over night. Stir in sugar and add the soyaflour. Knead into a dough.

If you don't have any pollen simply mix soyaflour with thick sugar syrup. It helps if the syrup is warm.

(b) Brewers Yeast (Unsalted)

Available from Mauri DYC Foods, CPO Box 10, Auckland 1, Phone 764-049, price is \$29.03 for a 10 kg bag and about \$28.00/bag for 50 bags or more.

(c) Lactalbumin (Fine Spray Dried)

This, product plus yeast, forms the basis of the Beltsville diet formulated by Dr Shimanuki and his team. Lactalbumin can be purchased through NZ Co-op Dairy Co, Hamilton, Phone 80-939 (contact Richard Haywood) or directly through the NZ Dairy Board, Wellington, Phone 724-399 (contact Bill Nalins or Robyn Laing). The NZ Co-op Dairy Co produces lactalbumin on contract to the Dairy Board so the account will come from the Board, price \$1.64/kg (packed in 25 kg bags).

Be careful to specify the fine lactalbumin as produced at Reporoa. Tirau and Goldern Bay factories use a ring-dried process but the lactalbumin is too coarse for feeding to bees.

The Beltsville diet is as follows:

2 parts yeast
1 part lactalbumin

Take 35 parts of this substitute and mix with 65 parts of dry sugar. Add water to make a patty - or put another way:

Beltsville

24 kg yeast
12 kg lactalbumin
65 kg sugar

or by Rule of Bag

2½ bags yeast
½ bag lactalbumin
2 bags sugar

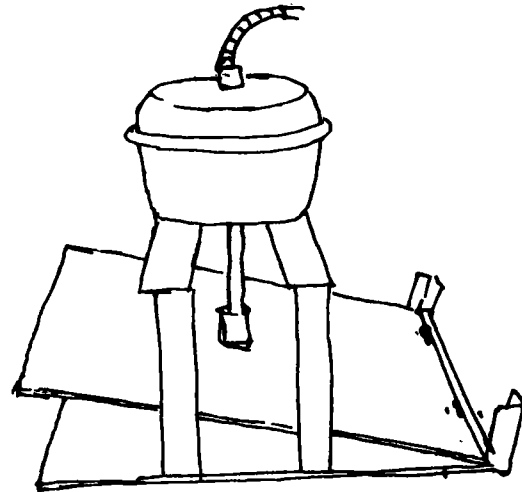
Bag measurements are good enough.

Add enough water to give a firm dough. I don't know how much "enough" is, so go easy on the water to start with. One beekeeper in Canterbury used to mix supplements in an old commercial dough mixer. I don't know if a concrete mixer would do or not. Perhaps someone can tell me.

Anyway, once mixed take pieces of dough - about 500 gm - and flatten to around 12 mm. Cover with pieces of waxed grease proof lunch paper to prevent drying out.

The patties can be used straight away or stored in the freezer. Place the patties on the top bars directly over the brood nest. Each patty should last 2-3 weeks depending on hive strength and availability of natural pollen. Some hives will readily eat all the patty while others will only clear it away from between the top bars. Expect consumption to drop off after 8-10 weeks of feeding even if no pollen sources are around. The bees seem to get sick of the pollen substitute. Feeding could begin late August and continue through until October/November.

Flattening the patties is a chore. An American beekeeper made a patty press from a couple of plates of steel hinged at one end. He fitted an air brake and connecting rod or "piston" to the top plate and hooked the brake to an air compressor (25-30 psi) via an air valve. The air brake came from a car wrecker's yard. The unit looked something like the sketch.

COLONY PRODUCTION

Canada	52.5 kg
Argentina	27.5 kg
Mexico	26.3 kg
USA	23.4 kg
USSR	21.9 kg
Japan	21.5 kg
China	19.7 kg

New Zealand's 10 year average is 28.8 kg/hive, although last year's was only 18.8 kg (Bee World 64(2): 1983).

TRADE TABLE

* Metal Division Board Feeders (Contact Les Gera, Hamilton, Phone 51-667)

These feeders will hold either 4 l (small size) or 6 l (large size) of sugar syrup. They cost \$1.20 each (both sizes) with freight about 30 ¢ each if

required. You'll need to fit two end blocks and a middle block plus a top bar. The feeders should also be dipped in hot paraffin wax or linseed oil or even polyurethane to prevent rusting. Bracken fern will stop bees drowning.

The internal folds on these feeders don't always meet near the top so don't overfill or the syrup will run out. Fill to within 20-25 mm of the top.

* Acrylic Primer

Most primers are oil based but this new white primer from Resene, 19 Somerset Street, Hamilton, Phone 74-332, is water based. The agents claim it has excellent adhesion to wood (including mati and totara) plaster, blocks and old paint work. They don't recommend it for steel.

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A thought for this past season: "When things look really bad try plastic surgery - cut up your credit cards"

The Grapevine

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EXPORT AGENT

For those wanting to tackle the Middle East you could do worse than contact Mr Adel Yousef who is the Director of Oppex which is the exporting arm of Otago Press and Produce Co. Mr Yousef is an Arab and has excellent connections in the Middle East. His company can also type set Arabic Script and they also have Arabic Letraset. They are experienced exporters of fruit and vegetables to the Middle East.

SPEAKING OF EXPORTING

Social and business habits vary from country to country. A promising deal can easily be lost through breach of some etiquette or other, or "mis-translation" of word or misuse of certain colours.

Ad-men for Pepsi-Cola had their slogan "Come alive with pepsi" translated into Mandarin Chinese. The translation turned out to mean "Pepsi brings your ancestors back from the grave". Then there was the GM corporation who were marketing their chevrolet Nova in Mexico and wondering why sales were very quiet. It seems the word Nova or Na-va in Mexican meant "won't go"!



GOING TO OZ FOR THE WINTER?

If so you might like to drop in on some of their state conferences:

- THE SOUTH AUSTRALIAN APIARISTS' ASSOCIATION INC, advise that their 1984 conference will be held at the Weintal Motel, Tanunda on 27 and 28 June 1984. Annual dinner on the first night (27 June). The Barossa Valley is well known as a tourist area and as such it is hoped many interstate visitors will be present to enjoy the Barossa hospitality.
- QUEENSLAND BEEKEEPERS' ASSOCIATION alter dates Friday, 8 June Conference, Saturday, 9 June. Conference morning Field Day at QAC Lawes, afternoon.
- CAA OF NSW: The annual conference of the Commercial Apiarists' Association of NSW will be held at the Dubbo RSL Club 12-13 July, 1984. Branch executive meeting 11 July, 1984.
- FCAAA Annual General Meeting will be held Dubbo, NSW, 16 and 17 July, 1984.
- VAA ANNUAL CONFERENCE will be held at Shepparton on 19, 20 and 21 June, 1984.
- THE TASMANIAN BEEKEEPERS' ASSOCIATION will hold its Annual Conference at the Beachway Motel, Ulverstone, on Saturday, 9 June, 1984.
- NORTH-EASTERN APIARISTS' ASSOCIATION (VIC) will hold its annual conference at the Council Club Hotel, Whangaratta, Vic, on Friday, 4 May. Registration at 9.00 am.

ADVISORY SERVICES DIVISION MOTTO

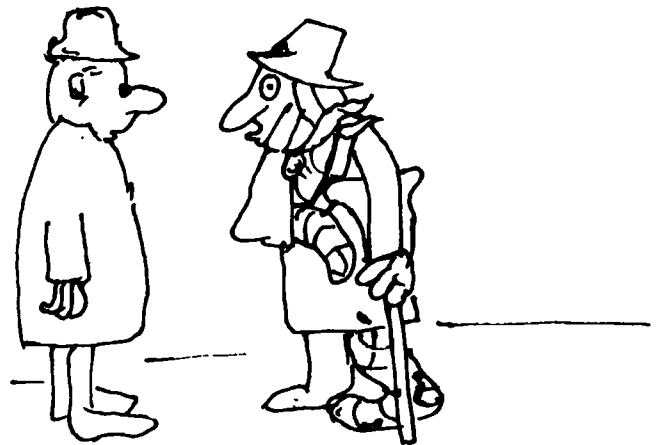
(Could it be the NBA's motto too?)

*We the willing,
Led by the unknowing,
Are doing the impossible
For the ungrateful.
We have done so much
For so long for so little,
We are now qualified
To do anything with nothing.*

INDUSTRY PLANNING WORKSHOP

A very involved two days was spent at Flock House recently by members of MAF, NBA Exec, Trustees Telford and BOP Community College. We attempted to define the Association's mission, its goals and objectives within those goals. We even had time to determine some action plans which outline in detail how the objectives are going to be achieved.

If you go to conference this year you'll be involved in helping the executive develop more action plans. It promises to be a good conference.



For 20 years I refused to discuss politics then just this morning I said to myself, "Why not?"

OTHER EVENTS COMING UP

- Next NBA meeting (remit time) 1 June 1984.
- Financial management workshop, BOP Community College, 21-22 June 1984.
- Beekeepers' field day on "mobilization and mechanization". This will be held at the apiary complex, BOP Community College, 7 June 1984 starting at 10.30 am. The morning's programme will be a look, see and play session with lots of vehicles, equipment and hive modifications all designed to make shifting bee colonies easier.

In the afternoon we'll have some papers and discussion on the MAF's contingency plan in case of a serious exotic disease outbreak during kiwifruit pollination time. We'll also talk about the effects of shifting on bees, especially orientation and look at developing a highway safety and emergency procedure.

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NEWSLETTERS - Waikato Bee Notes

A number of you have been asking, "Have I missed out on a newsletter?". Well, yes and no! You have missed out but only because I haven't written one since last August. Can't blame the Post Office this time.

Bye for now

Murray.

G M Reid
Apicultural Advisory Officer

