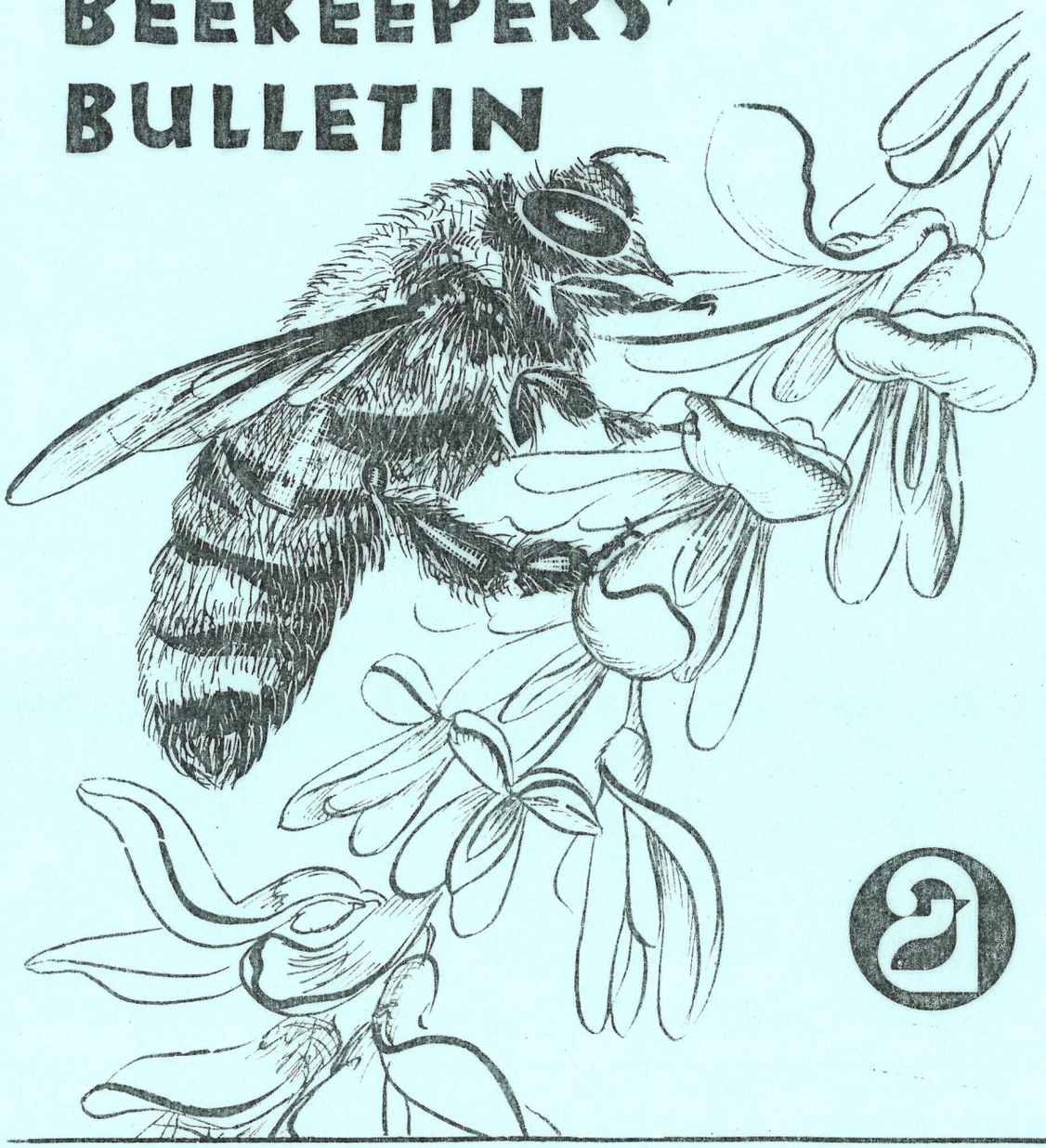
THE BEEKEEPERS' BULLETIN



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I've heard the comment more than once recently that this has been a season to forget. Unfortunately that's all too often what we do - it's actually these seasons we should remember. Anyone can produce big crops in a 12 tonne plus rata flow, but the real test of beekeeping is to get what honey is available in a year such as this one.

Everyone has the same comment about this season, that a small proportion of hives in a yard produced an 'average crop', but the others did little. Hence a below average year. The skill is in getting more hives to be good producers, and having fewer as passengers. This means making hives as even as possible, which results in simplified management and higher crops. Working apiaries as units, not hives, is a key approach especially with regard to requeening and feeding. There's more about this later in an article directed at people expanding into commercial beekeeping, but which is possibly of wider interest too.

The effects of drifting have been quite obvious to me over the last month or so as I've watched the uneven distribution of supers within apiaries. This not only complicates your management but also costs you honey overall - when wintering down this year decide to do something about it.

It looks like overall average crop will be 2.5 tonnes per hundred hundred on the West Coast and 1.5 - 2 in Nelson/Marlborough. Even at Christmas time things looked hopeful for a better season, but the wrong weather at the wrong time put paid to that.

BL levels this year are much the same as last year considering increased hive numbers - 220 diseased hives located in 125 different apiaries - or 1.4% and 8.7% respectively. Although there's been no significant rise in the incidence of foulbrood, there is certainly no room for complacency. 220 hives in 125 different apiaries means that the disease is very widely scattered. It's a problem we will always have with us, but is made more prevalent because of the action of certain individuals.

* The commercial beekeeper who attempts to cut corners in basic beekeeping management such as disease prevention and disease control. (They are two quite separate issues.) Their disease incidence is above average but is very sporadic, indicating that the BL is in their gear, rather than the area. Fortunately these people are not very common.

* The expanding/semi - commercial / sideline beekeeper who gets a big dose of disease early on in the development of their business. This happens mainly through ignorance, I suppose, but at least it is an educational experience (though an expensive one). See "Matheson's Maxim" in the next article.

* The hobbyist who spreads disease through abject ignorance. Fortunately much rarer than some people would like to make out. Can cause problems in the immediate vicinity, but usually not a great problem.

* The out-and-out rogue disease farmer. Appears from time to time, disappears eventually in a ball of flame from Government-issue patrol. Very rare.

Disease is a beekeepers' problem, and almost all beekeepers make the problem themselves. Attention to a few basic disease prevention rules, education and eternal vigilance will reduce it.

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'If you think education is expensive - try ignorance'

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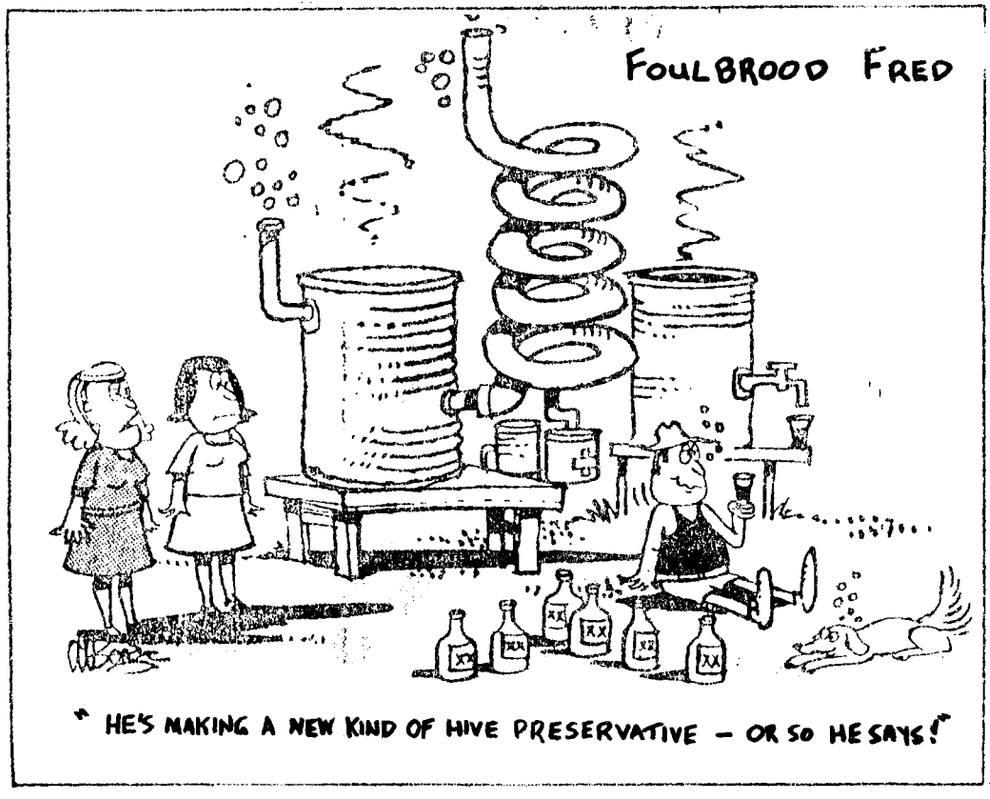


GROWING UP AS A BEEKEEPER - OR SHEDDING THE HOBBYIST MENTALITY

A lot of people in this district currently building up their hive numbers are now passing through (hopefully) on the rocky road that leads to a promised land somewhere called 'commercial beekeeping'. Figures given by Head Office show that a lot more of these hopefuls are to be found in my district - in the last five years the number of 'semi-commercial' beekeepers here has increased at twice the national rate.

People wanting to build up their own beekeeping business from scratch (a process rather like pulling yourself up by your own bootstraps) find that they encounter a lot of difficulties:

- there is no training facility for budding beekeepers. Sure, there are a few short courses run from time to time, but no block course where you can learn detailed seasonal management.

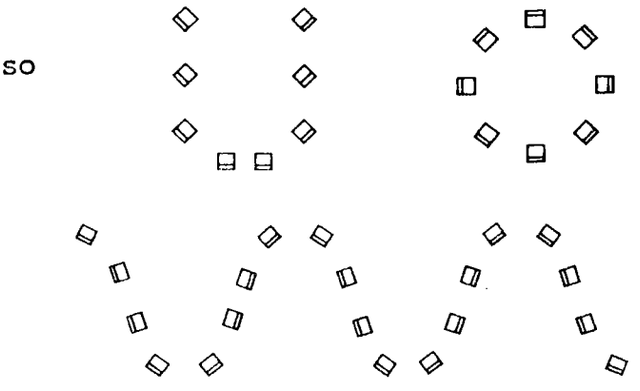
- most of these people haven't worked for a commercial beekeeper (or preferably beekeepers), so can't learn from that experience.

- all these people have started out life as a hobbyist. That isn't necessarily a black mark against them forever (like a form of apicultural apartheid), but it does mean that at some point along the line they have to stop thinking like a hobbyist and start thinking like a person who is in it for a living. That's a hard process, and doesn't happen overnight, but will probably make the difference between success and failure.

Where do I start, in talking about shedding the hobbyist mentality? As I write this, the lucky ones among you will be taking off honey. It may sound too obvious to mention, but of course you're harvesting boxes of honey off your hives, not frames (given a good season). And then take the frames/ boxes thing one stage further and start to learn to manage apiaries, not hives.

One of the main secrets of beekeeping is to have all the hives within each yard as even as possible. This simplifies management no end and saves a lot of time - when you've studied a few hives you'll know what they all need doing to them.

How is this achieved? It really only comes with practice, but you should try to treat each hive the same; requeen them all together, feed them the same. Even them up in brood and stores (BL!!) and stop drifiting - that's where foraging bees 'drift' down rows of hives so that some get super-strong and most get super weak.



hive layouts to prevent drifting. The double line indicates the hive entrance.

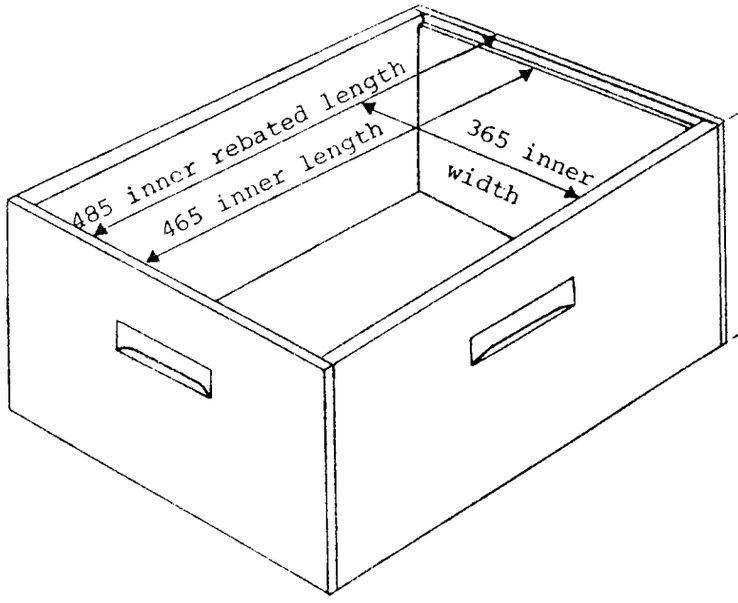
Drifting to ends of rows (and downwind) is painfully obvious in many yards at this time of year, and is definitely costing quite a few people some honey. Don't paint your boxes all the same colou and don't put your hives in straight rows.

Having just a few passenger hives reduces overall honey production per hive (which is what really counts). Passenger hives are usually the result of a poor queen and/or slow build up, and both of these can be overcome if plenty of nucs are run throughout the business. Some people suggest that the ratio of nucs to honey-producing units should be as high as 20% - distributed throughout the apiaries. I wonder how many people don't even have 10%.

As your hive numbers expand so will your number of sites - but make sure that as you consolidate sites are fully stocked to cut down excess running. Keep them as close to base as possible - the beekeepers who drive 100 miles each way to get an extra box of honey might just be kidding themselves.

Remember the fundamentals of site selection - closeness to nectar and pollen sources, shelter, sunlight, air drainage, protection from floods, and access. That last one is quite important - it seems that hobbyists are quite prepared to perform death-defying acts while carting full-depth supers of honey out of bizarre apiary sites. Just yesterday I had to inspect some hobbyist hives in Nelson city, and as I banged in the last piton on the traverse across to the hives I enquired whether anyone had ever fallen down from the site. "Oh yes, I fell down once while carrying a brood box. Killed the queen too." Minor inconveniences like this become major drawbacks when multiplied enough times - year round vehicle access is essential for apiaries.

Which brings me to one of my pet hates - gates. A day spent recently in the Motueka area with a couple of budding bee-keepers convinced me that Taranaki gates are mis-named. It's completely beyond me how farmers can bear to spend half an hour disassembling and assembling a gate each time they want to go through, but it's none of our business. Just remember that bees can fly over gates more easily than you can open and shut them (even good ones). Is it really worth going through 10 gates, 2 creeks and a swamp just to get your bees a couple of hundred metres further on?



Considerable efficiencies can be made by thinking seriously about what's in your sites. People cry out for scientific advances in beekeeping, yet it's been over 130 years since Langstroth invented his hive and some people still haven't caught on to a concept as basic as bee spacing. My warning in August's Bulletin, about joinery firms making bee boxes without realising how critical beespacing is, was quite timely, but it still didn't stop one firm from supplying a thousand boxes that were 5 mm too shallow. The bee spacing on those boxes is totally ruined. Perhaps the beekeeper will be propelled into having 3/4 depth gear sooner than he thought.

All beekeepers who start out should be going into 3/4 depth gear right from the start - people with hundreds of hives are breaking their necks to change and some with a hundred or two in full depth gear are swapping over before it's too late, If you're still unconvinced - go and work for a beekeeper taking off honey (in full depth gear).

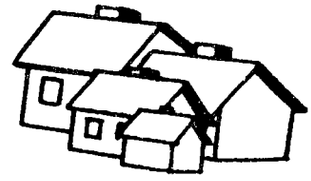
While it's essential that hives are standard, it is not essential that they are pretty, ornate, attractive, or marvels of joinery skill. I still remember visiting the beekeeper who was working deep into the night carefully putting the hand-carved lintel over the retractable fully-cantilevered landing platform on his examples of master-craftsmanship called floorboards. Meanwhile the bees were desperate for extra supers during a honey flow, but the floorboards for autumn increase had to be 'just-so'.

Anything that does the job correctly is OK - for a commercial business.

Winter is the time for making up gear - any beekeeping equipment stockist will tell you of the hordes of people who order gear as it is needed, not months in advance. And I've seen plenty of people nailing up supers during the honey flow. Adequate forward planning is vital for success.

One of the strongest bastions of hobbyist mentality is found in honey sheds - even in their existence. Do you really need a honey house at all? People run hundreds or even thousands of hives without owning one. And if you really must, do you need a Rolls-Royve honey shed if you've only got 50 hives and a hundred nucs?

It's wise to build as big as possible to start with, luxuries like lining and other finishing work can come later. Second hand equipment also represents a sound investment - you can buy bigger for the same price. I'm quite convinced that, for example, it's not worth having an extractor which holds less than 8 frames in a 'commercial' shed, and these can be bought second hand for less than the price of a brand-spanking 2- or 4- frame. Get the basic shed up that will last you for a long time - worry about filling it up with fancy gear later on.



If you want to reduce beekeeping management to a few basic essentials, I guess that you'd start with:

- young queens
- adequate feeding
- disease-free colonies

as the three most important. All these three are bonded together with a common theme - TIMING.

It's all very well having a young queen, but this year I saw a lot of requeening close to the honey flow. The methods used resulted in a break in brood-rearing for a week or so, which meant a break in emergence three weeks later and a break in forager recruitment three weeks after that. Those hives didn't produce anything in a season like this one.

If you can't buy queens early enough in spring (a common problem, especially for new customers) then either buy them in autumn or raise your own. If you don't know how, ask me and I'll show you queen raising MY way.

A well-fed colony; simple enough, but again timing is the most important thing. It's amazing how many colonies (this year especially) have built up on the flow and will now winter well. Remember that workers generally don't forage until they're 3 weeks old, and before that they have spent another 3 weeks developing, and remember that you want peak population of foragers at or prior to the beginning of the main flow. Learn your local conditions and do your sums correctly.

When you're desperately trying to make increase by thrashing your own hives for nucs, burning them is a fairly counter-productive sort of exercise. Matheson's Maxim of beekeeping states that every person building up a beekeeping business will suffer a plastering of BL at sometime. Murphy's corollary of this law states that such a plastering will happen at the worst possible time.

In my experience this often seems to at the 100 - 150 hive stage, and it seriously hinders an expansion programme. If you were intensly philisophical about it you might welcome this plastering as a good thing, which it probably is as it may well prevent a huge outbreak when you've got five times as many hives to deal with. However, most people would be keen to prevent it happening at any time, so

- study healthy brood and learn what BL looks like. Go out with a commercial beekeeper when he finds some.

- always check brood before taking honey off

- check brood before swapping brood or stores

- never allow diseased hives to be robbed out

- don't worry about the other bloke's hives more than your own.

That list is obviously not comprehensive, but following it will eliminate most of your disease.

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'The great difficulty in education is to get experience out of ideas.'

George Santayana

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SMOKE DETECTORS

In my last issue I wrote about thermostats, and said that 'burning down their own honey houses seems to be a favourite pastime of beekeepers, with an annual tournament being held somewhere in the country'. That statement wasn't meant to be prophetic, but within a week or so one of our beekeepers was trying his darnedest to win the trophy for the Nelson apiary district.

Apart from installing back-up thermostats and being very careful with anything electrical, one elementary safety precaution which very few beekeepers take is installing a heat detector or a smoke detector.

One simple smoke alarm is the 'Smokegard' - a battery operated model which sounds an alarm if smoke is present. It runs on a 9V battery, which lasts about 12 months, and is fitted with a battery test button which should be used regularly.

These units cost about $28 and are stocked by most firms listed under 'Fire Protection' in the yellow pages.

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FROM HERE AND THERE .....

Worried about grease dripping into honey from your extractor? Caltex make a special lubricant for use in food processing machines, called 'Snow White Petrolatum'. Cost $2 for a 500 g tin, 'Seven Dwarfs' brand temporarily out of stock.

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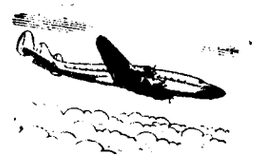
The beekeepers' study tour to Australia could have run into problems with the poor season that many areas seem to have had. If there are not enough registrations, it may be re-scheduled for May. This will give beekeepers a bit more time to get extracting and queen-raising finished, and yet there will still be plenty happening in Australian beekeeping.



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Disclaimer time again - mention of any proprietary product does not imply endorsement by M.A.F. or recommendation over similar products not mentioned.

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There is a new aglink out on kiwifruit pollination, entitled 'Kiwifruit pollination, male to female ratios and bee activity'. Reference HPP 233.

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The Nelson and Marlborough NBA branches and the Wellington Beekeepers' Association will be holding a 'field day' over the weekend of 27/28 February. Programme:

Saturday 27 - picnic lunch and afternoon field day at apiary site in the Sounds (Meet at Picton 11 am) evening meal at restaurant in Blenheim.

Sunday 28 - Morning bus or car trip to Waihopai Valley - guests of Craig Deans

Further details from Haike Tane (Waihopae Valley 860) or Craig Deans (Waihopai Valley 825).

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A little hint from the West Coast, - the best type of embedding 'board' for waxing frames is a piece of pink Batts insulation, cut to size in exactly the same way as a board. Being soft, this puts even pressure on the whole sheet of foundation, so there's no cutting through the ends while the middle is hardly started.

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EXPORT MARKETING COURSE

There will be a course on export marketing at Telford Farm Training Institute, Balclutha, in June. It is not just for beekeepers, but is for farmers, horticulturalists and any primary producers who are interested as potential export marketers. Subjects include; how to go about marketing traditional and new export products, export incentives, use of trade commissions, promotional trips, letters of credit, financing to point of sale, transport.

As this is an invitation-only course, anyone interested had better get in touch with me.

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'Speech was given to man to conceal his thoughts'

- Voltaire

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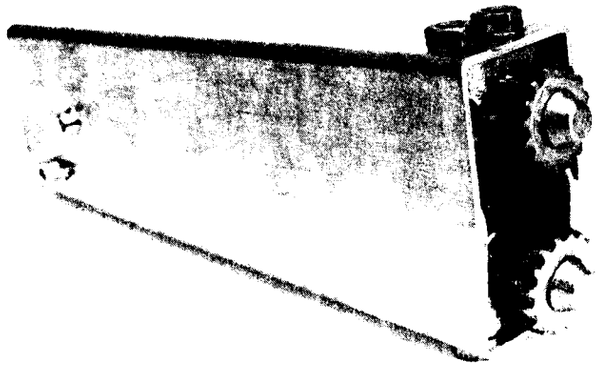
My sympathy to the West Coast beekeepers who lost apiaries in last month's gentle summer rains.

FRAME WIRING MADE SIMPLE

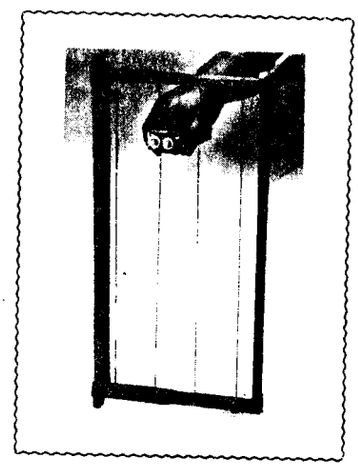


The Crimper

Hands up everyone who enjoys wiring up frames. Hmm, thought so. And getting those tacks in the right place to re-tension wires on old frames is even more fun. Well those days are over thanks to one of the nattiest little gadgets I've seen in a while. It's the frame wire crimper from Guilfoyle's in Australia.

This is a small hand-held device containing two cogs. These crimp the wire, tensioning it at the same time. It doesn't make the wiring board obsolete for a commercial beekeeper, but it is very handy for patching up any 'misses' and, more importantly, re-doing old frames.

I bought one last year for, I think, $A10. Enquiries to:
John L. Guilfoyle (Sales) Pty Ltd
PO Box 18
Darra
Queensland 4076
AUSTRALIA



QUEEN REARING

You should have your autumn queen raising programme well underway by now. One advantage of a poor season is that you don't have to spend a lot of time mucking around with sticky awful honey, but you can get down to the real business of fiddling about with bees.

From now on we should have a couple of months of warm settled weather which is ideal for queen raising. Hives are populous and well fed,and there are plenty of drones about.

* It's commonly held that wax cell cups should be made from very light wax - for example this quote from the current M.A.F. beekeeping bulletin. "The bees will more readily accept cells made from pure, perfectly clean, pale to white beeswax".

A recent American researcher achieved some different results:

- 87% of cells made from old brood combs were accepted
- 77% were accepted if the cells were made of fresh wax from newly drawn-out combs
- 70% of cells were accepted if either of the following were used: cappings wax, new foundation, 50% old beeswax and 50% paraffin
- cells made of 100% paraffin wax were all rejected

Reference

Ebadi, R; Gary, N.E. 1980. Acceptance by honey bee colonies of larvae in artificial queen cells. Journal of Apicultural Research 19(2):127-132

* Queen cells are very delicate - those 6 - 8 days old are most likely to be killed if dropped. While those 10 days are more robust, they can still suffer wing damage if subject to physical shock. And you realise what wing damage does to mating successes.

  Spangler, H.G.: Taber, S. 1981. Adult queen honey bee storage and larval queen resistance to physical shock. American Bee Journal 121(5) 21-22, 25

* I will be holding a mini-field day on queen raising in the Westport area on Thursday 18 February. It will invol involve some talking about queen-raising methods, stock selection etc, and demonstration of setting up starter hives and grafting. Details will be advertised later.

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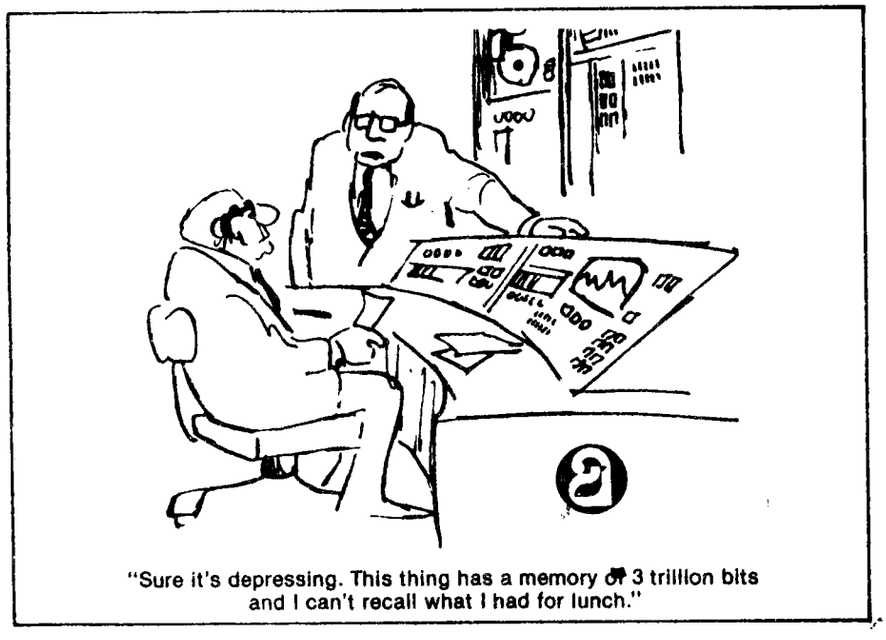
Now that MAF has entered the computer age, this cartoon is quite appropriate.

Cheers

A.G. Matheson
APICULTURAL ADVISORY OFFICER



"Sure it's depressing. This thing has a memory of 3 trillion bits and I can't recall what I had for lunch."