

NO. 27

SEPTEMBER 1985



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The Southern Beekeeper



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YOUR NEWSLETTER

SEPTEMBER 1985

"Gudday"

The Southern Beekeeper has a new editor once again! I am the third in line behind Trevor Bryant and Cliff Van Eaton. Having read the past issues, I would like to continue the progression of positive changes that my predecessors initiated. The beekeeper has become an excellent publication well worth reading.

Unfortunately the financial resources available for the newsletter are diminishing. The circulation has been reduced from approximately 400 to 80 copies for this issue. Only those individuals with 50 hives or more plus clubs, industry groups and advisers shall receive copies.

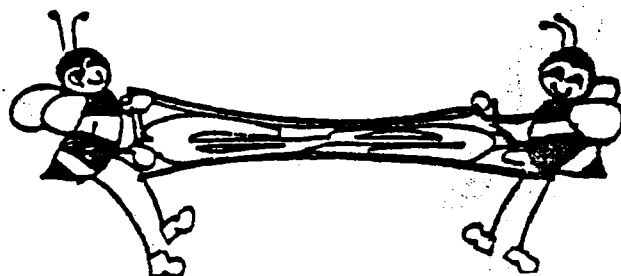
The current issue (No 27) cost MAF approximatley \$1.50 plus labour to produce and deliver into your hands. A biannual or quarterly circulation to 400 beekeepers becomes prohibitively expensive.

Most apicultural advisers produce quarterly newsletters with each issue containing approximately 20-30 pages. They are an excellent medium for passing on management advice, current local national and international events of consequence and changes in government policy. Plus all the countless details so vital to the beekeeping industry's well being.

I regret the loss of communication with the numerous hobbist beekeepers. Many shall only receive the small insert letter attached to the Annual Disease Statements. The consequences will appear in the disease statistics. However economic realities within MAF dictate that old mass newsletter circulation system must go!

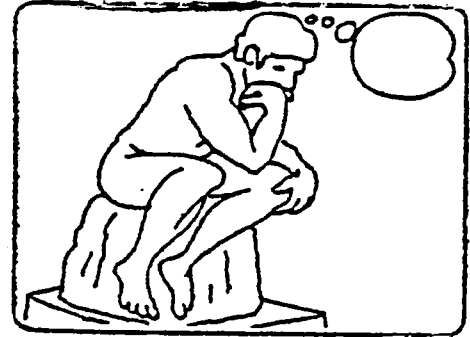
So where does the Southern Beekeeper progress from here? My answer lies in the Questionnaire circulated with the Disease Statements. If you have not responded, please do so and mail it today. (copies available on request).

BEFORE I SAY ANYTHING I'D.
LIKE TO MAKE A
SPEECH.



A nominal fee (\$10.00) would guarantee quarterly circulation to all interested (motivated) beekeepers. Is that the answer? Other AAO's are trying it.

Okay, back to reality. I am impressed with quality beekeeping operations I have found in Southland/Otago. Beekeepers are knowledgeable and sophisticated in their hive management techniques.



You make the Canadian Industry look a shambles. Which it is in, by the way (see more in this issue). As beekeepers you are world class.

As businessmen, I don't know We all know about W.O.L. Way of Life. For most of us that is what it is all about. At the recent Expanding into Commercial Beekeeping Course (ECB) - we pounded it into them that W.O.L. was your reward for your days work.

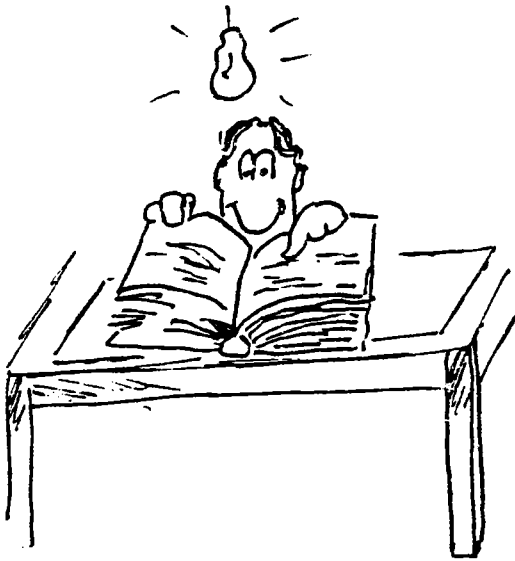
Current economic climate dictates more than just sound hive management, however, to stay a successful beekeeper. Shrewd money management and business judgements are now a requirement to remain beekeeping. If large powerful corporations can go into receivership, so can you.

Many beekeepers are making the adjustments. Cash books, cashflows, budgets combined with sound financial advice from your accountants etc. are a must now. The financially prudent (not necessarily the least indebted) shall survive.

Others, like Nelson, will clasp their budgetary telescope to their blind eye and bravely sail forth to be financially shot to pieces.

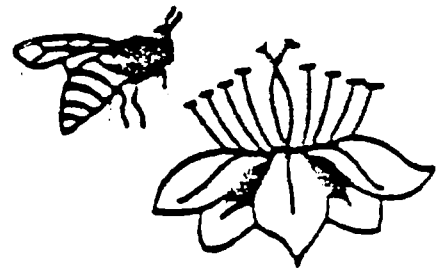
Clive





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!



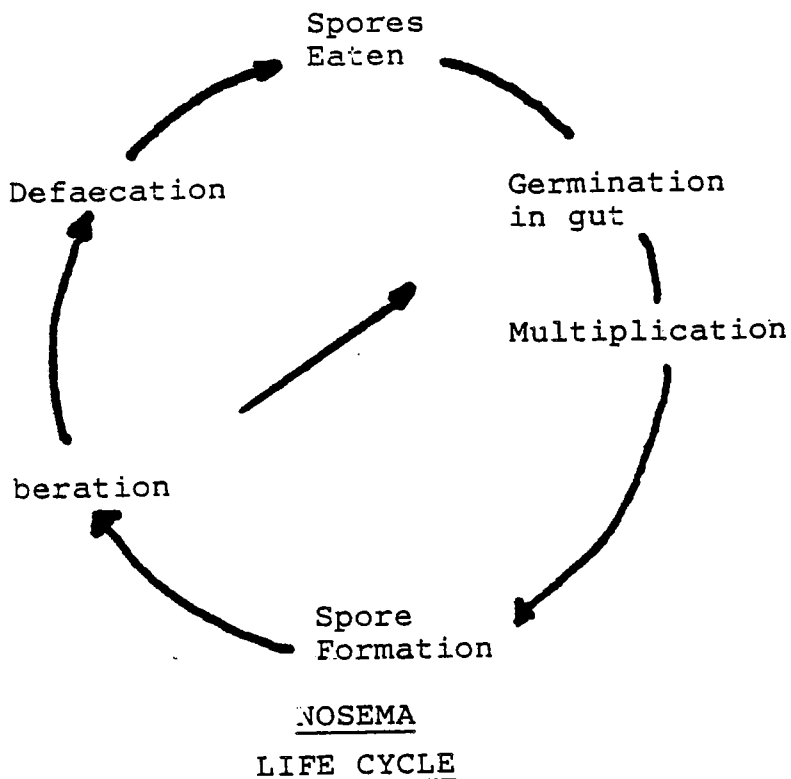
NOSEMA DISEASE

One of the most widely discussed but least often recognised diseases of adult bees, nosema disease, costs the world's beekeeping industry millions of dollars in lost income every year. Through its debilitating effects on workers and queens, the pathogen Nosema apis Zander reduces the vigour of infected colonies, resulting in a decreased lifespan of workers and queens, a reduction in brood rearing, increased supersedure, and reduced honey crops.

Diagnosis

Although the disease is endemic in nearly all honey bee colonies, the infestation may be so light that there are no obvious symptoms. Where symptoms occur they may point to problems other than nosema disease, so microscopic examination of bees taken from suspect colonies is the ONLY SURE METHOD of confirming the absence or presence of Nosema apis.

Often the first sign of the disease that is apparent to the beekeeper is failure of colonies to prosper. Sometimes a colony may dwindle, losing bees more rapidly than they can be replaced. Under the



stress of a severe infection, colonies may show the following symptoms: bees with disjointed wings and swollen abdomens crawling about in front of the colonies. Inability to fly and loss of the stinging reflex are also frequently associated with nosema disease.

An examination of the midgut may assist in the diagnosis. Holding the thorax of the (dead!) bee in the left hand, and gently pulling out the last abdominal segment with the right, will expose the hindgut, midgut, and honey sac. The normal midgut is straw brown in colour, and not enlarged. An expanded milky white midgut, in which the crossbands are nearly gone, points to the presence of Nosema apis.

A microscopic examination is the only certain method of diagnosis. Take bees from the hive entrances (i.e. older workers), or obviously sick bees from in front of the hive. In winter take bees from the tops of the clusters, where infected bees tend to congregate. Use 25 bees per sample, and place them in a small jar in some clear methylated spirits or absolute alcohol. (Gordon's gin is fine, though I would prefer this to be sent separately to save me having to strain the bees out.) To be effective the sample should be taken in autumn and any fumagillin fed them too. Bees need continuous access to the drug, which persists in the syrup or in honey made from the syrup. More about that later.



For those wishing to do your own testing, you will need a microscope with 400 x magnification (over \$500?), a device called a haemocytometer (about \$100 worth?), as well as a few microscope slides, etc. I can give details of the method if required.

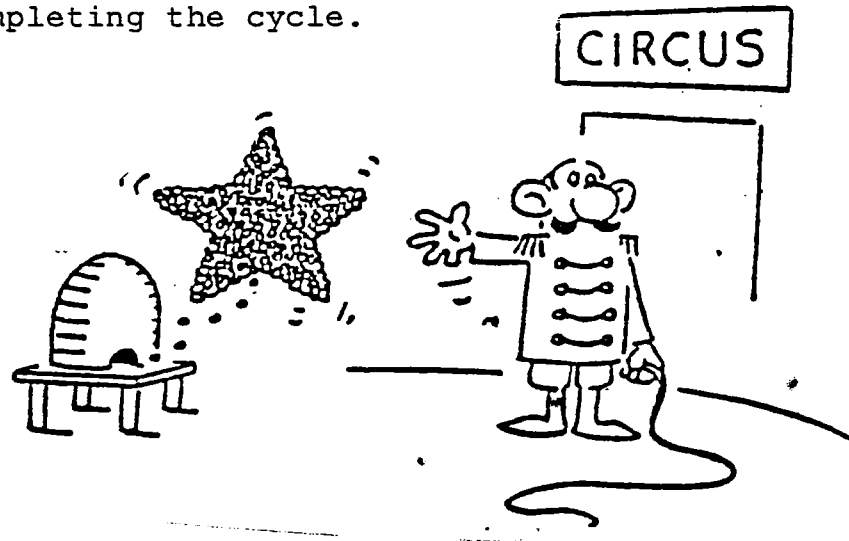
Spore levels are interpreted as:

up to 1 million spores per bee	light infection
1-5 million per bee	medium
over 5 million per bee	heavy

Causative organism

Nosema apis Zander is a spore-forming protozoan that parasitizes the gut lining of adult honey bees, destroying the cells lining the gut in the process and condemning the infected bees to a fate of gradual starvation. The cycle starts when spores are swallowed by the bee and pass into the midgut. Here they "germinate", i.e. the content of the spores pass through "polar filaments" into gut lining cells to which they have become attached, and where they form the "vegetative" or reproductive stage of the organism.

The vegetative stages grow and multiply; in 6-10 days the host cell becomes filled with newly formed spores, which are released into the gut when the cell ruptures as part of the normal process of digestion. Because of the infection, however, the cell becomes ineffective in digestion, thus reducing the amount of nutrients available to the bee. A severely infected bee accumulates undigested food matter and Nosema spores in the gut until, during extended confinement to the hive, it is forced to defaecate within the hive. As other worker bees clean up, they in turn swallow the spores, thus completing the cycle.



The length of time over which the spores may remain viable depends on the conditions to which they are exposed. While they remain capable of germination for months in a mass of dried faecal matter, spores lose viability in several days after being suspended in water or exposed to direct sunlight. They are also readily killed by heat and by suitable fumigants.

Disease transmission

Worker bees infected with Nosema apis undergo a premature reduction in the size of the fat body and of the brood food (hypopharyngeal) glands, and their life span is significantly shortened. The ability of a colony to rear brood and to produce a crop of honey is strongly influenced by the number of bees infected.

Toward the end of winter and the beginning of spring, when colonies may be confined for extended periods of time, some defaecation will occur within the hive, even in a normal colony. The faecal matter will be cleaned up by other bees, which in turn become infected. Thus the level of infection within the brood nest rises rapidly, and continues to do so as cleaning activities are extended

to meet the demand for more brood comb area. A colony in which a very high level of infection is reached during the winter may dwindle so rapidly in strength that, due to the premature death of the old, overwintered bees, it is unable to survive.

The proportion of infected bees, after having reached its highest level in the late spring or early summer, quickly declines, because as soon as regular flights become possible the excreta are voided normally outside the hive. From this point on very little further transmission of spores from infected to healthy bees takes place, and by the end of the season nearly all the infected bees have been replaced by healthy ones.

Unfortunately a sufficient number of spores will survive in the colony to infect a few bees of the cluster, and the cycle starts afresh. Combs soiled with spore-containing faecal matter, then, are the natural carriers of the pathogen from one season to another. Since the disease reaches a low level during the summer months, outside agencies such as contaminated water or sources of nectar do not seem to be important.

References:

Herbert, E.W. 1979. Brood rearing by small caged honey bee colonies fed whey-yeast pollen substitutes. Journal of Apicultural Research 18 (1): 43-46.

Herbert, E.W.; Shimanuki, H. 1980. An evaluation of seven potential pollen substitutes for honey bees. American Bee Journal 120 (5): 349-350.

Herbert, E.W.; Shimanuki, H. 1981. Cholesterol and salt requirements for brood rearing by honey bees fed a pollen substitute. American Bee Journal 121 (8): 572-574.

(Note that the first two references to lactalbumin as "whey". Shades of Little Miss Muppet, eating her curds and lactalbumin.)

"A verbal agreement is not worth
the paper it's written on"

Prime Minister Mr Lange



GST OR GAS TAX

This tax, if implemented, will have a significant impact on all beekeepers. As providers of a service, pollination, and a product, honey, queens etc GST will have to be added onto all these.

As I understand it, and let's face it, some of us really are yet up with the nuts and bolts, if you well a product such as honey to a packer you will add on GST, with pollination GST will be added on all accounts.

All beekeepers will have to register with the tax department and every two or six months make tax due payments.

Some larger companies will probably leave it up to their accountants but regardless very good records will have to be kept and maintained for scrutinising by tax inspectors.

Now is the time to start getting your book work up to date and/or start keeping cash books, receipt and account rendered books etc, etc. A good filing cabinet will be essential so start thinking about it now.

When full details are known I shall organise some in-house courses to assist you but nothing beats being forewarned and prepared.



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



"I don't normally do this sort of thing, but I've just received my hive levy."

ON BEING AN ACTIVE BRANCH MEMBER

Are you an active member,
 The kind that would be missed ?
 Or are you just contented
 That your name is on the list?
 Do you attend all meetings
 And mingle with the crowd ?
 Or just come from time to time
 Then crab both long and loud ?
 Do you take an active part
 To help the branch along,
 Or are you satisfied to be
 The type to "just belong" ?
 Do you ever give suggestions
 When the branch looks kinda sick,
 Or just leave that up to just a few
 Then talk about the "clique" ?
 And when the program is scheduled
 That means success if done,
 Do you put your shoulder to the wheel
 And work with everyone ?
 So attend your meetings regularly,
 And help with hand and heart,
 Don't be just a member,
 But take an active part.
 Think this over, members
 Are we right or wrong ?
 Are YOU an active member.....
 Or do you "just belong" ?

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HOW TO KNOW WHEN YOU'RE GROWING OLDER

Everything hurts and what doesn't hurt, doesn't work.
 The gleam in your eyes is from the sun hitting your bifocals.
 You feel like the night before, and you haven't been anywhere.
 Your little black book contains only names ending in M.D.
 You get winded playing chess
 You finally reach the top of the ladder, and find it leaning
 against the wrong wall.

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NOSEMA IN CAGED QUEENS

Queens in mating nucs and mailing cages can become infected with Nosema spores, and heavily infected queens are usually superceded after introduction. Ways of reducing Nosema infection in queens include feeding fumagillin (Fumidil-B) to mating nucs, and hives that are used to provide attendants.

But what about feeding fumagillin to the queen and attendants in cages? The answer is that feeding it in water is not very useful, as the bees don't readily take it up. But a solution of fumagillin in sugar syrup is very good at reducing Nosema levels in the cage.



To test this, USDA scientists fed queen bees with about 100 000 Nosema spores. After a week back in the hive the queens were caged with 6 attendants, and stored for a week in an incubator. Half of them were fed fumagillin in syrup, while the others were fed straight syrup.

The syrup was 50% by volume (or approximately 2:1 by weight), with fumagillin added at the rate of 100 mg/3.8 litres of syrup. That's a quarter of a small (0.5 g) bottle of Fumidil B per imperial gallon of syrup, or the whole bottle per 19 litres.

The results:

queens not fed fumagillin average of 18 million spores
per queen

queens fed fumagillin no spores detectable

Remember, though, that if a queen is installed in a colony with infected bees, she can be reinfected fairly rapidly. Remember too, that infection in a colony that has been treated with drugs can recur once treatment has been stopped, because of the reservoir of spores in the hive.

Lehnert, T. 1977. Nosema control in queens in mailing cages.
Journal of Apicultural Research 16 (3): 163-164

FOR THE BEEKEEPER WHO HAS EVERYTHING?

A glossy colour insert in "Gleanings in Bee Culture" advertises what might be that hard-to-find gift you've been looking for. A firm call 'Porcelain by Patricia' advises us of the latest edition in their beekeeper's collector series. It's a porcelain figure of a person working a hive, about 225 x 225 x 175 mm.

As only 1 500 are to be made, "Patricia" advises us that these are sure to increase in value. The price - a more \$NZ 714 each!



FEEDING FUMAGILLIN

Recommendations for the proper feeding of fumagillin specify that only fresh preparations of sugar syrup and the drug should be used. How long does the drug maintain its effectiveness after being mixed?

Earlier studies have shown that once the medicated syrup has been manipulated by bees and converted to honey, it is effective against Nosema for 8 months. If the unmanipulated syrup is stored at refrigerator temperatures (4°C), it retains its effectiveness for at least 3½ years.

So fumagillin is stable for ages when kept in a fridge. But beekeeper's sheds aren't fridges: how long can medicated syrup be kept at room temperature? A recent experiment has provided the answer.

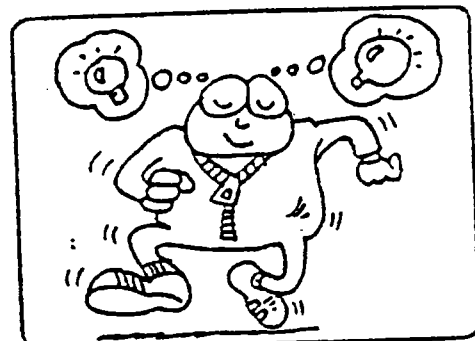
Fumagillin retains its activity for at least 30 days when stored at 20°C or 32°C, in either sucrose syrup or high fructose corn syrup (HFCS). So it seems you can make a drug/syrup mix a month before use if necessary, without it losing effectiveness.

Fumagillin must be fed in sugar syrup to hives: research has proven that dusting the drug (mixed with dry sugar) in the hive is useless, as is feeding it in a candy.

Fumidil-B is not the only preparation which contains the drug fumagillin. Beekeepers overseas have recently been given the choice of a second such preparation, Nosem-X. This formula has been proven to be as effective as Fumidil-B in suppressing Nosema infection.

I don't know if this drug is available in New Zealand. Fumidil-B is made by Abbott Laboratories, and Nosem-X by Mid-Continent Agrimarketing Inc, Overland Park, Kansas 66204, USA.

There are many other drugs which are NOT effective against Nosema, such as: Nosemack, Humatin and Enteroseptol. Neither is their use legal in New Zealand.



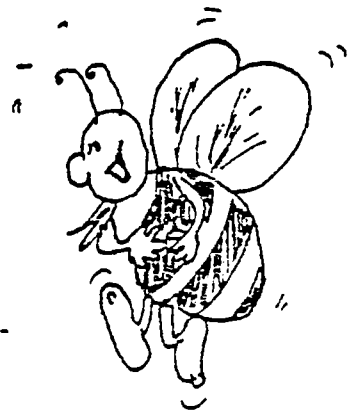
Furgala, B.; Sugden, M.A.; 1985. Residual activity of bicyclohexylammonium fumagillin in sucrose syrup and high fructose corn syrup stored at two temperatures.
American Bee Journal 125 (1): 47-48.

Sugden, M.A.; Furgala, B.; 1985. Bioequivalence studies comparing Fumidil-B and Nosema-X, two commercial compounds containing bicyclohexylammonium fumagillin.
American Bee Journal 125 (1): 49-50.

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FROM THE BELIEVE-IT-OR-NOT DEPARTMENT

The latest Apicultural Abstracts reports the publishing of a new journal in Japan called Ho Shin, or Api-acupuncture. The magazine records the foundation of a Society for Api-acupuncture, and reports on the experience that some beekeepers have had with using stings as acupuncture needles - application in a planned way to specific sites on the body is used to treat particular conditions.



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STRESS AND THE BEEKEEPER

The past poor honey crops have left a number of beekeepers in a financially dicey situation. It is here that stress levels soar, and life becomes not difficult, but seemingly impossible.

Stress may cause opposite effects in different people. For instance, one may just "bite the bullet" and go all the harder, whereas another may give up. This can make stress very difficult to recognise.

One thing is vital, you must talk to people about the problem. An honest conversation about the problem. An honest conversation about the problem with friends and family (especially your wife/husband) may not solve it, but will release some of the load. Keeping the problem to yourself is not the answer.

"I used to use cliches like they were going out of fashion, now I avoid them like the plague!"

ANTI STRESS TEA-RECIPE

Unfortunately, I don't have a nice chocolate cake recipe, but I think the "Georgian Beekeepers Tea" from Steve Ogden replaces it rather favourably.



BEAR IN THE KITCHEN

1 pint (600 ml) of strong tea
100 g Honey
1 tspn *vanilla sugar (optional)
7 oz Vodka (not optional)

Heat the tea and honey in a saucepan until honey is dissolved. Add vanilla sugar if required. Add Vodka and reheat but DO NOT BOIL.

*Vanilla sugar is prepared by storing a vanilla pod with the sugar.

(Steve Ogden is a researcher at Otago University and is investigating high-country pollination).

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AN IMPORTANT MESSAGE ON BEE DISEASES

I have reprinted below an excellent article on hygiene in the apiary which was written by Dr Elbert Jaycox of New Mexico. Read and inwardly digest, because we all need to have a healthy attitude to what should be a minor problem of beekeeping.

Overreactions to Diseases of Bees

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 sterilise themselves and the environment around them after a y 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.

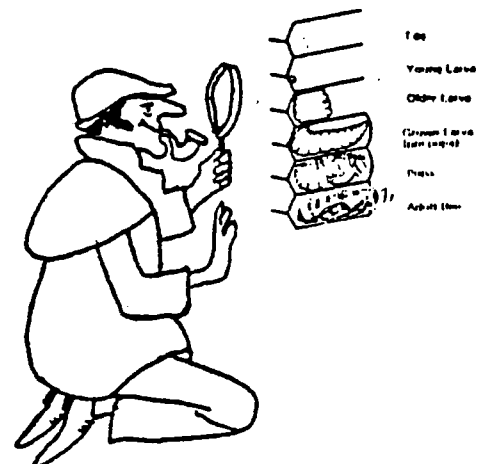


Complaints against inspectors are based on similar thinking. Some beekeepers believe that the inspector should change clothing, take a lye or alcohol bath, and perform other rituals after encountering a colony with AFB while inspecting. Anything less is sure to spread disease, according to those experts.

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 also have 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 recognize 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.



SOLVING THE WORLD'S ECONOMIC WOES!

John Cherrington, writing in the New Zealand Farmer, July 1984 was bemoaning the huge European food surpluses. He said the trouble was all the economists were trained on theories based on scarce resources. He would apply the Stalin technique which goes something like this:

"Take 100 notable world economists and isolate them in luxurious surroundings and tell them to solve the world's problems. They must find a workable solution within three years or ten will be chosen by lot and shot. This will be repeated every two years ..."



THE LEARNER'S DILEMMA

There is something I don't know that I am supposed to know. I don't know what it is I don't know and yet am supposed to know and I feel I look stupid if I seem both not to know it and not to know what it is I don't know. Therefore I pretend I know it.

This is nerve-racking since I don't know what I must pretend to know. Therefore I pretend to know everything. I feel you know what I am supposed to know but you can't tell me what it is because you don't know that I don't know what it is.

You may know what I don't know, but not that I don't know it, and I can't tell you. So you will have to tell me everything.

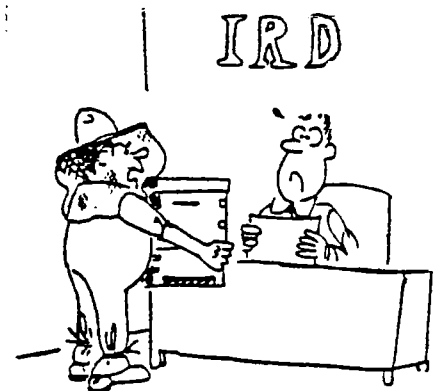
(Laing, 1970)

TAX CHANGES

You might not give your workers company cars and expense accounts, but the new fringe benefit tax could still affect you. It will be payable on any non-cash benefit enjoyed by your employees directly or indirectly in relation to their employment. It includes such things as: gifts, sale, rental or lease of goods and services to employees at below fair market value; low interest loans to employees.

It will be payable quarterly at 45c in the dollar on the estimated difference between fair market value and the price paid.

Fringe benefit tax does not include (despite some ridiculous newspaper stories to the contrary) things provided as part of normal working conditions, such as cafeterias, cafeteria meals, morning and afternoon teas, etc.



"You wanted to know about my deductions for veils?"

BOILERS

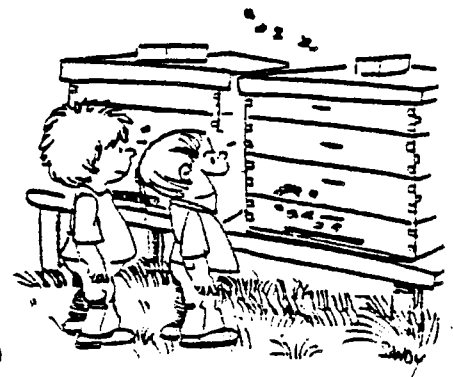
An interesting article was published by Laurie Braybrook in the March issue of the Australasian Beekeeper. Laurie is a Senior Apiary Officer in Victoria. In his article he dwelt on the safety aspects of boilers and some of the horrendous explosions that have occurred. He gave a check list of things to do when operating a boiler. I think its timely to remind you of some of them.

- * Light the fire and open the steam stop valve on the outlet line. These valves are usually close to the boiler. Check the outlet pipes and see if they are warming up. If you're in a hard-water area examine the pipes and valves for mineral build up.
- * Check the pressure relief valve by compressing the spring. See that the pressure gauge is working.
- * If the water level disappears out of the bottom of the sight glass let the fire run down and the boiler cool off before filling with water. If the water level has gone too high you'll probably lose your head of steam. However, you can check which way the water has gone by using the cock at the bottom of the sight gauge if one is fitted.
- * Don't let a boiler stand idle with the water level showing in the glass. This means the boiler tubes are half covered and the junction between water and air is where corrosion occurs. Fill the boiler until water floods out of the steam stop valve then shut this valve and turn off the water. You'll need to drain this excess water off when you next use the boiler.
- * At the end of the day (and before flooding the boiler) open the blow down cock at the bottom of the boiler (if one is fitted) and reduce the water level about 25 mm in the sight glass. This removes the sediment from the boiler.

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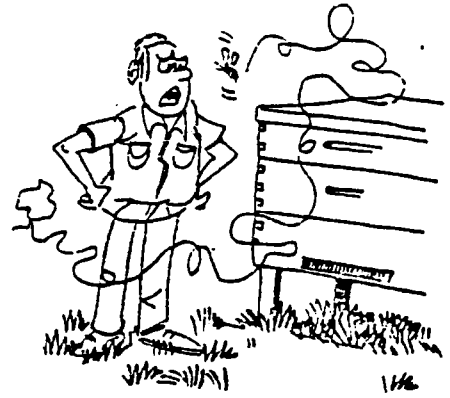
NEW EXPORT MARKET OR "SKY'S THE LIMIT"

The recent US space shuttle STS 13 carried an interesting payload - 3300 Italian worker bees and a queen. The object - to observe comb building in outer space. The result, although disorganised at first, the bees regained their orientation and at zero gravity built 30½ square inches (200 cm²) of comb. The queen laid 35 eggs during the seven day flight. The cost - \$60000 - \$100,000 (NZ). The conclusion, the honey bees' engineering capability is



"Bees are the most intelligent creatures on earth — the queen rules."

still a marvel, surpassed by few other species. Dare I say, homo sapiens. Also NASA is producing eggs at approximately \$3000 each! Now if we organise a consortium, offer a discount, maybe we could sell a few eggs at say



"You can't feel me! You've been into another patch of marijuana blooms!"

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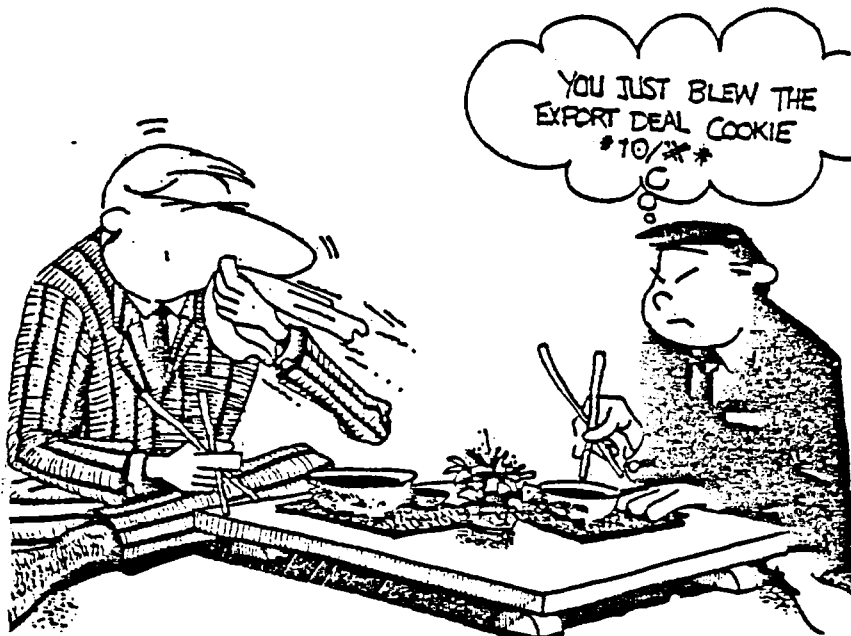
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SADDER BUT WISER

Paraffin waxers are pretty dangerous things and we are all guilty of being a bit careless with them. Here are a couple of suggestions from a recent issue of "Waikato Bee Notes".

- * Wear safety glasses or sun-glasses when loading a melter.
I was with a beekeeper last year who splashed hot wax into his eyes. The wax burnt his eyes and proved very difficult to get out. It meant a trip to a doctor.
- * Keep a supply of damp sacks to smother any wax fires in the melter itself. Extinguishers are useless.
- * Check the can under the overflow drain tap and empty the water out before you light the fire. I tipped a can of molten wax back into a melter one day that turned out to have a lot of water in it. It's rather frightening to see a whole melter of wax froth up and run all over the ground with fires everywhere. In this case water was the most effective agent for dousing grass fires. It took 1½ packets of wax to refill the melter!



REQUEENING WITHOUT DEQUEENING

Speeding up the requeening process is what most beekeepers would like to do. The technique of introducing a queen cell to a colony without any attempt to isolate it from the existing queen has been tried by various people. Often claims are made for its success or failure, without any real analysis of results.

The success rate of this technique varies with: age of existing queen; introduction technique; conditions at time of introduction and emergence. A trial by Tibor Szabo in Alberta was carried out with unprotected cells put in the 4th or 5th box late in the honey flow. Examination of the cells five days after placement showed:

- 70% successful emergence
- 11% cells destroyed
- 6% cells contained dead queen
- 13% cells couldn't be found

The old queens had been marked, and a later check of the queens showed:

- 13% queen from introduced cell
- 24% queen reared by colony
- 53% old queen retained
- 7% queenless
- 3% origin of queen unknown



What's the reason for such a poor success rate? For one thing, the cells were put out five days after grafting when queen larvae are very delicate. Although beekeepers sometimes put out immature cells, it is not recommended.

The success rate would also have been increased if the cells had been protected, either with hose pipe or sticky tape. Kerry Simpson carried out a small trial in the Maniatoto introducing protected cells to the brood nest. His results:

- 57% original queen only found
- 40% successful supersedure
- 3% both queens present

It's probable that a more careful search of the 57% of hives with apparently only the original queen in would have found some more two-queeners.

I'm not advocating this technique for everyone to try, but it could be useful in seasons where money is tight, or for people taking over an outfit which hasn't had a regular requeening programme. (I phrased it like that because, of course, it would only be someone else's, not yours).

Simpson, K.W. 1983. Requeening without dequeening in boondocks. New Zealand Beekeeper 177:17-18

Szabo, T.I. 1982. Requeening honeybee colonies with queen cells. Journal of Apicultural Research 21 (4): 208-211

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 the Gore 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.



Use the new pink forms distributed during the last year. (see the back cover).

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.

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.



It's worth a thought!

MORE ON THE HONEY "MOUNTAIN"

Latest news from North America is that the Reagan administration in the USA is threatening to eliminate all farm subsidies, including the honey-buying programme. This would have a serious effect on the price of honey in the US. Honey prices in Canada have already dropped from \$C 0.60/lb two years ago to \$C 0.38/lb this year.

CALIFORNIA SEARCHING FOR SOME AFRICAN BEES

At present California and national beekeeping authorities and government officials were trying to unravel the mysteries surrounding the discovery of the incursion of African honey bees into the United States.

The colony was found in an oilfield in the southern San Josquin valley near Bakersfield, California.

The colony was apparently discovered on June 14 by a heavy equipment operator at the oilfield. He was reported to have noticed the carcasses of a fox and a crow and stopped to investigate. A rabbit ran by a burrow hole, and bees swarmed out to attack the rabbit. The worker scooped up a load of oil-soaked, asphalt-like dirt and plugged the burrow hole.



The identification was confirmed at the Baton Rouge Bee Lab. The sample was said to be "highly Africanized". The colony was located about 60 miles northwest of Bakersfield. In the general area are irrigated farming areas, and 110 apiaries were found in the 400 square mile quarantined area. All of the 110 apiaries have been "challenged" by aggression tests and were ruled not to be Africanized.

The burrow spotted by the oilfield worker was excavated. The nest he found was large, even by European bee standards - 20 combs in a space 5-1/2 feet long x 1 foot wide. Officials said that the size indicated the colony had been in the burrow for as long as a year. It was an active colony, brood and honey were found in the combs. No mites were found on the bees which were analyzed.

YOU KNOW ITS GOING TO BE ONE OF THOSE DAYS WHEN

- ... you call suicide prevention and they put you on hold.
- ... your birthday cake collapses under the weight of the candles.
- ... you meet a TV camera crew in the driveway on your return home.
- ... your twin brother forgot your birthday.
- ... your tax refund cheque bounces.

TRADE TABLE

Send in your ads - Buy, Sell, Swap.

For Sale

New Bottom Boards

- surplus to requirements
- too numerous to count
- price negotiable

Phone Lawrence 93 (K Trevathan)

For Sale

- 1400 litre s/s dairy tank - double skinned with single phase reduction gear box - \$700 ONO

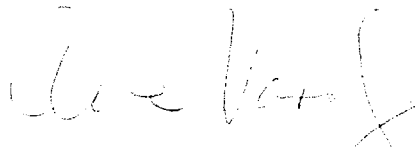
B W Jones, Centre Road, Outram, Phone 8174, Mosgiel.

Beekeeper Vacancies

- At least three beekeepers in the area looking for seasonal/full time help, contact AAO, Gore

Well so ends my first my first Southland Beekeeper. If you have not sent in the Questionnaire, please do so. All thoughts and comments about this publication will be appreciated.

Thank you



(Clive Vardy)
Apiary Advisory Officer
GORE



**Ministry of
Agriculture & Fisheries
New Zealand**

Inspector of Apiaries,
Ministry of Agriculture and Fisheries
P.O. Box 378, GORE

Date / /

Dear Sir,

As requested by the Apiaries Act, 1969 (Sec. 18, 19), we report the finding of American Brood at the following apiary:

Date Detected
Site Number
Land Owner
Road and District
Number of Hives Found
Action Taken
 Yours faithfully

Registration No. P.....

I require more of these forms YES/NO



**Ministry of
Agriculture & Fisheries
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