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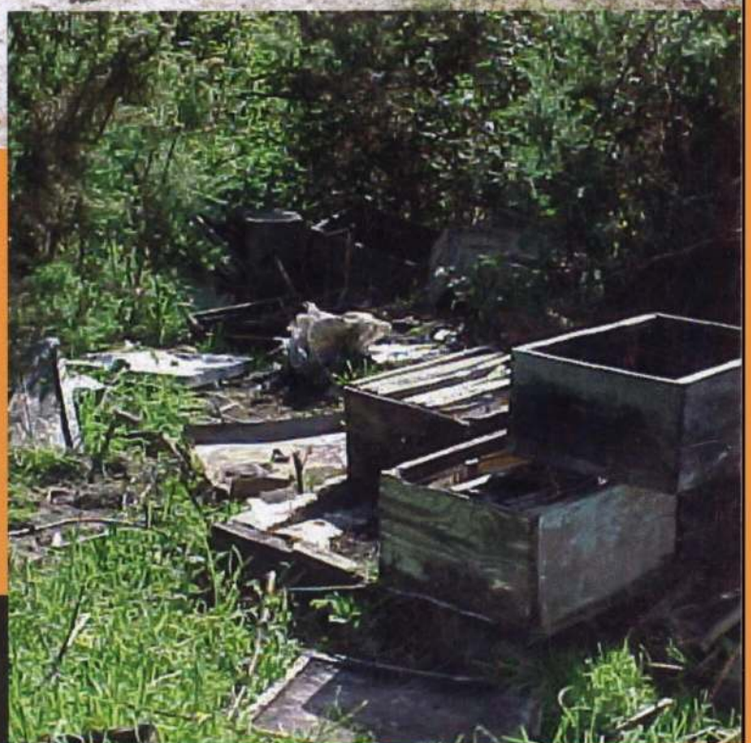
The New Zealand BeeKeeper

DERELICT HIVES DESTROYED



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NATIONAL EXECUTIVE BEEKEEPERS' ASSOCIATION OF NZ (Inc.)

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Neglected Hives Destroyed in Foulbrood Clean-up

By Richard Hatfield

More than 80 abandoned hives were destroyed in December by the NZ Beekeepers Association in conjunction with Agriquality and its American Foulbrood Pest Management Strategy contractor.

Destruction of the southern North Island hives, all in derelict conditions and many ridden with disease, took two days in a massive operation, using the powers of Authorised Persons in levels one and two of the Biosecurity Act and Pest Management Strategy Order in Council.

It is a tragedy that so many hives had to be destroyed, and is only ever done when necessary. The beekeepers involved had been warned many times about the unkempt nature of their apiaries. The association is now applying the full weight of the Bio-Security Act to anyone with diseased hives or not adequately managing their apiaries.

Because a number of people were involved in the operation, its cost was significant and will be passed on to the beekeepers concerned. Those who manage their apiaries, pay their levy and keep themselves relatively disease-free, should not have to pay for - or even tolerate - this level of neglect.

Training and information resources are available to beekeepers from Agriquality and other bodies, but a small percentage of operators will probably always refuse to change their ways. They need to be ready to face the full force of the Bio-Security Act.

A settling-in period often follows new legislation, but the implementation of the pest management strategy for American foulbrood places responsibility for education, control and enforcement in the hands of the association - you and I.

Hives covered with thick gorse or strewn in pieces on the ground had to be incinerated in a two-day operation.

It is now two years since the legislation was passed. Considerable effort has gone into education and many beekeepers now qualified in the Disease Elimination Conformity Agreement have the knowledge to identify American foulbrood and, following examples laid out in the "Yellow Book", keep it contained at an early stage.

The association is taking its responsibility seriously and is now adopting a harder line on those not complying. Many problems in the industry may take time to address but with everybody's help, disease and errant beekeepers can be eliminated. Losses can then be reduced and beekeeping made more profitable.

A trench is dug (top right), neglected hives tipped into it (above), and then burned (below) during a two-day operation under the Bio-Security Act and Pest Management Strategy Order.

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Varroa destructor

By Gudrun Koeniger

When Edward Jacobson found mites in a colony of the Indonesian indigenous honeybee, Apis cerana, in Java early last century, he sent them to the Leiden museum, Holland. In 1904, scientist Dr A.C. Oudemans identified them as a new species and named them Varroa jacobsoni [Oudemans 1904].

Little more was thought of the mite until the beginning of the 1970s, when massive damage was done to the Western honeybee, *Apis mellifera*. Varroa mite research then intensified.

Mites on *Apis mellifera* were more easily found, being larger and in higher concentration levels than those on *Apis cerana*. Mites on those could only be located after deliberate searching, with special, labour-intensive procedures.

Work done in Indonesia by scientist Dr D.L. Anderson revealed that mites from the indigenous bees in Java, (*Varroa jacobsoni*) could not reproduce in the brood of *A. mellifera*, suggesting genetic differences in the mite races.

An international search for genetic differences in Varroa mites infesting *A. mellifera*, resulted in only a slight variation between the two types. Then, using molecular methods (DNA sequencing) of Varroa samples from the original host *A. cerana* from all over Asia, great variations were discovered. Dr Anderson identified 18 different types of mites (Haplotypes) and he gave each type the name of the island or land in which it was found. Three types from the Philippines could not be classified, but with computer-aided computation he was able to classify 15 types into two main groups.

One group includes mites from the Asian sub-continent, and mites from the Malaysian-Indonesian region make up the other. The genetic differences of mites in each main group amount to less than 2%. Yet between the two main groups, there is more than a 6% genetic difference.

In the new classification, the main group from the Asian sub-continent receives the new title, *Varroa Destructor* (Anderson, Trueman 2000). The Malaysian-Indonesian main group, to which the originally-identified mites belong, is *Varroa jacobsoni* (Oudemans 1904).

Genetic research of mites from 32 countries in different continents was collected from the Western honey bee, *A. mellifera*. It confirmed there were only two Varroa types that had developed to become parasitic: the Korean and Japan/Thailand mites.

To date, only the Korean *Varroa destructor* has been found in Europe. It is also present in the Middle East, South Africa, North America and, more recently, South America. In earlier research, this mite had been classified as Russian type (R type) or Ger type.

The Japan/Thailand (Japan type or J type) *Varroa destructor* is spread throughout North and South America, but appears less damaging to the Western honeybee than the Korean mite.

A total of four Varroa species are now known: *Varroa jacobsoni* (1904), *Varroa underwoodi* (1987), *Varroa rindereri* (1996) and *Varroa destructor* (2000). Until further research, it remains unknown whether the Philippines Varroa is a separate species.

Taken from the Scottish Bee Journal, January 2001

Sources:
Anderson, D.L. Apidology 31 (2000), 281-292.
Anderson, D.L; Trueman, J.W.H. Experimental and Applied Acarology 24 (2000), 165-189

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Committee recommends new fees structure for beekeeper operations

The Compliance Committee for the National Beekeepers Association of NZ had it's first meeting in December, with three main items on the Agenda.

- **Process of Compliance -**
  It was agreed the association pursue outstanding levies over $100. Only the president, the secretary and the association's solicitor, will have access to the names of those being referred to debt collectors.

- **Levy basis -**
  Discussing the current levy system's history, the difficulties for those with small apiaries and compliance problems related to unregistered apiaries, we recommended changing the basis of the levy to the following:

  1. A basic levy under Section 90 of the Bio-Security Act for every registered beekeeper (regardless of size) to cover running of the register, education and dissemination of information through the magazine, and association membership. Proposed cost was from $30 to $40.
  2. A hive levy under section 90 of the Bio-Security Act based on hive numbers on November 1 each year. It would cover disease management (AFB PMS), enforcement, running the association, auditing and exotic tracking. (This is currently paid for by all commercial beekeepers - 10 plus hives).
  3. A marketing levy under the Commodity Levy Act based on the declaration of honey sold during the last 12 months. This will have to be voted on by the industry to be passed. Domestic beekeepers will be able to claim an exemption.

- **Compliance**
  Since the introduction of the Bio-Security Act, the emphasis has been on education with no hard action taken against offenders. The new executive wants to take greater control of the industry and will insist on greater compliance to the regulations. Systems need to be modernised for our use.

  The apiary register which is our membership list should be brought in-house. With greater emphasis on disease control being given to beekeepers and the branches, the register should be available via the Internet. All beekeepers will be given a PIN and pass word to review and add to their information. The register will contain all the information presently required but will be given note pad features for administration purposes. AP1 will have full access. AP2 will be able to mark the files for updating which the association secretary will complete.

  This proposal is open for discussion and feedback received will be used in putting a final proposal to July's conference.

  Our recommendations provide for some major changes and additional costs, especially for hobby beekeepers. Until now, they have been benefiting from schemes paid for by the commercial sector, but have had no say in running the industry, unless they became members.

  If we are to succeed in eliminating American foulbrood and adapting to the Varroa mite, we must co-ordinate our efforts and work together.

  Responses to this recommendation since it appeared on the Internet ranged from no change to one proposing a levy system where beekeepers can choose to either pay by hive numbers or on an apiary basis.

Send in your thoughts on these recommendations, addressed to Compliance Committee, C/- Executive secretary, P O Box 715, Wellington 6015.

Frank Lindsay
Compliance Committee Chairman.

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News from the colonies

Frank Lindsay
(secretary)

Southern North Island branch

After one of the worst spring periods for some years (hives had to be fed until Christmas), the weather turned hot. A short, sharp flow was enjoyed in the north and a more sustained flow through the middle of our region. The Wellington area dried out quickly, with just 7.5mm of rain in January.

The honey flow has all but finished on lowland sand country but is still going on inland high-country with supers still being added. Overall, the crop in this region is shaping up to be above average.

As soon as the crop is over, the branch will be promoting Disease Elimination Conformity Agreement (DECA) courses and "Diseaseathons". Advance notice will also be given of a major training exercise for hobbyists this year.

• Buzz Weekend

Pohangina Valley Camp
August 24, 25, 26

A full weekend of training for budding beekeepers and those who need to feel comfortable with bees.
$80 fee includes meals, accommodation and course costs. A DECA course can be run for an additional $25.
Accommodation is limited to 75 people (bookings taken in order of paid registrations) but space is available for campers and caravans (although it gets cold in the valley!)
Applications close June 30 and more information available from convenor Peter Ferris (06)378-7632 or treasurer Mary-Ann Lindsay (04) 478-3367

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Franklin Beekeepers Club

President's Report

Franklin beekeepers are extracting some of the new season's honey.

It is now time to prepare for the honey competition at the club's March meeting. Please don't disappoint the judge this year - let's all enter at least one item.

Following a call in December to find a new meeting venue, a room at Anselmi's Stockyards, Pukekohe East Rd was secured. Charges are minimal and it can be used on any day or evening of the week. It was secured in time for the committee's February 16 meeting, where final preparations for the club's stand at the Franklin A and P Show were to be made.

A Christmas party was held at Lyn and Lance Yates' Waipipi farmlet and while dinner was being prepared, a small group inspected Lyn's hives. Paintings of flowers in full bloom on the front of each hive drew interest.

Another club member has his hive registration displayed boldly on his front fence, visible from the road. This type of identification would have prevented much lost time during Varroa inspections last year.

- The Annual General Meeting and Honey Show will be held on March 4 in the Franklin Arts and Culture Centre, cnr Wesley and Edinburgh streets. Registrations for the show will be taken from 10am and the meeting starts at 10.30.

Governance committee

Now we have a full complement, the governance committee can now start setting out what the National Beekeepers Association of New Zealand should be.

For those interested, the governance committee's draft terms of reference is available from the web site, www.nba.org.nz

At the first meeting, hopefully to be held this month, answers will be found to questions like:
What is the purpose of the association?
Why is the association required?
What purpose does it serve?
What purpose should it serve?

It is intended to have a draft report at this year's annual conference, where proposals may be made to members.

- Richard Hatfield (president)

South Canterbury Branch Varroa Project gets S.F.F. Approval

The S.C. Branch was not content to sit back hoping that someone else would find the answers to living with Varroa, so they successfully applied to the Sustainable Farming Fund for finance to have some research done.

Their project is to scientifically determine, if reducing the cell size of honey bees will reduce the reproductive ability of Varroa and their detrimental effect, to a level at which bees can be farmed on a commercially economic and environmental sustainable level, without the use of chemicals.

The Sustainable Farming Fund was set up by the Labour Government to support Community-driven programmes aimed at improving financial and environmental performance of land-based sectors. Its aim is to help rural communities, of which beekeepers are members, to overcome barriers to their social and economic viability. Competition for funds was highly competitive with 350 applications being received in the first application round. Of these, 60 were asked to submit a full project proposal.

Branch President and project leader, Peter Lyttle said that "it was through that amazing communication and information source 'The Internet', and more specifically, the **Beekeeping.co.nz** site and its '**Beelist**' set up by Nick Wallingford, that members of the S.C. Branch became aware of Arizona beekeepers Ed and Dee Lusby, who for a number of years now, have been successfully running 600 hives in a varroa infested area without the use of any chemicals". Their main method of control is using small, cell size comb foundation. Although they have mites in their hives, they do not build up to a level which adversely affects the colonies, while their neighbouring beekeepers are treating mite problems with chemicals which contaminate the beeswax and honey.

The idea of controlling Varroa by reducing cell size of the foundation is very appealing as it is an input which is already costed into most beekeeping operations. As such, it will not add significantly to costs, compared to the cost of using chemicals, which many beekeeping operations cannot sustain.

Although the Lusbys have been using this system successfully for a number of years, there seems to have been little scientific work done to prove the method.

Most people will not realise that the natural size of the cells of *Apis Mellifera* is 5 mm across the flats, but since around the 1920s most commercially manufactured comb foundation has been made with 5.4 mm cells. The reason for the increase in size was that some influential beekeepers of the time reasoned that if you increased the cell size, larger bees would be produced to carry larger loads of honey and increase production. However, no evidence has ever been produced to prove the theory but the large cell size has remained.

Varroa has co-existed with the Asian honey bee *Apis Cerana,* which has 4.8 mm cells, for thousands of years and only crossed species to *Apis Mellifera* after their cell size had been artificially increased.

The Lusbys thought there could be a connection and that mother nature knows best, so returned their bees to their natural cell size of 5 mm. This only produced limited success so they further reduced the cell size to 4.9 mm, enough to limit the reproduction of the mites at a level without affecting the colony.

The South Canterbury Branch has contracted the main part of the research to Hort Research, at Ruakura, led by Dr Mark Goodwin. The research is being conducted over two years and has already started. The first part of the research is to determine if reducing the cell size does in fact reduce the reproductive ability of Varroa. Four different cell sizes will be tested ranging from 5.4 mm down to 4.8 mm. If this is successful, the most affective cell size will then be used in field trials on production hives to determine if there are any detrimental effects on honey production or any other problems associated with changing the cell size.

The S.C. Branch wishes to emphasise that this project has been instigated for the benefit of all beekeepers and results will be published in the N.Z. Beekeeper magazine and posted on the **www.beekeeping.co.nz** web site and the **www.nba.org.nz** web site.

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New Publisher

This is the magazine's first issue to be published by Crown Kerr Printing of Dunedin.

Crown Kerr owner Bob Bannister has extensive printing and publishing experience (going back more years than he cares to remember). The company traces its history back to the 1890s, when all printing was from hand-set, lead type. These days, of course, it's all computer setting and design, with copy arriving via the Internet from around the country.

Angela Crompton, a working journalist, has been appointed editor. It is fair to say the membership at large has been aware of some production shortcomings and the Executive hopes to see its presentation improved. Angela does not have an extensive knowledge of beekeeping, so a committee to assist with technical advice is being set up. Editorial terms of reference are being drawn up and guidelines for letters to the editor will be re-visited. More on this later.

Under the arrangement, Crown Kerr will sell and arrange advertising and pick up all advertising revenue. It will publish the magazine and have it ready for mailing at no charge to the association. NZBA will supply mailing labels, pay postage and meet the cost of Angela's editorial fee.

The size of the magazine will be governed by the amount of advertising sold and this first issue is limited to 16 pages. As advertising revenue increases, so will the size of the magazine.

Crown Kerr and Angela have some exciting ideas for design and layout, so it will be interesting to watch what evolves during the next few months.

- Lin McKenzie

Letters to the Editor

In my President's article in the *Beekeeper* (December 2000 issue), I indicated there was little planning, prior to this year. Clearly, this was a mistake on my behalf as planning was undertaken through the 1980s and into the 1990s.

Only the past few years has planning fallen by the wayside. I therefore apologise to previous executive members and committees for any inference of poor management practice.

I would also like to clarify another point I made in a letter to the editor. Bay of Plenty president Gerrit Hyink has now accepted a position on the governance committee. I would like to thank all the members of the various committees for accepting their nominations. The NBA operates largely on voluntary effort. Active member participation is the lifeblood of the organisation.

Richard Hatfield
President

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Consider Varroa threat when preparing hives for winter

By Frank Lindsay

Wellington has dried out this summer and the countryside looks like Blenheim. Plants showing signs of stress include the Rangiora bushes with crumpled, shrunken leaves.

Nectar sources are still available, though, with fennel and thistle flowering along road edges and waste areas and red and orange eucalyptus flowers appearing in city gardens and parks.

Hive maintenance

This is a good time to take honey and how much is left on the hive to feed the bees over winter depends upon the way you operate your bees and your spring management (does the area have an early flow or late flow?).

Some beekeepers take most of the honey off now and winter their hives in single supers with six frames of honey. Spare bees are either harvested for export, used to make up nucs or, in the case of old field bees, left to just hang on the outside of the hive to die off naturally.

Hives are then inspected in August and fed sugar syrup to stimulate the queen into laying and feeding the hive.

Other beekeepers winter in two supers, leaving one full of honey. These hives can be left until later in spring before inspection.

For the past 20 years, I have wintered my hives three super high to cater for honey flows as early as October, requiring an earlier, strong population. The hives have been left with a super and a half of honey and room for a large cluster of bees. It is a rather expensive practice for a commercial beekeeper, but I prefer to leave the hives well-stocked for spring and, as a swarm control, split and re-queen any that are breeding up excessively.

This management practice must now change with the Varroa mite's arrival in New Zealand. Hives with large populations will cost more to control, so over the next few months I hope to get ideas off other beekeepers and work out an operational plan that best suits our area. While many consider the "movement control" line unfair, it gives those of us below it time to observe and adapt before the mite arrives.

I have started replacing frames containing patches of drone comb with foundation comb, drawn and filled with honey. Before removing any honey, hives are inspected for disease, either moving frames with drone cells to the outside of the super, or replacing them altogether with a newly-drawn one. By the time mites arrive, most of my hives will have just one drone comb and many beautifully-drawn worker combs.

Bee disturbance

Hives in the country can be worked at any time of the day but beekeepers with hives near houses must select their times carefully.

A few weeks ago when hives were working the flow, bees were too busy to notice when their hive was opened, inspected and honey supers removed. That changes as soon as the flow finishes.

Bees start hanging around the honey house, looking for exposed honey frames. That makes honey removal difficult when other hives are nearby, because a roof left off one will quickly attract robbers from another. Resident bees defend their harvest and a stinging situation can develop.

That shouldn't happen if you plan your activities, but if it does, cover the hive entrances with grass and turn a water sprinkler on. Bees don't work in the rain and will quickly settle down.

Honey is usually only extracted from frames fully or 80% capped. If the flow finished suddenly, bees may not have fully capped supers put on late in the flow. They can be removed, though, if the honey has ripened. (Test such a frame by holding it flat and giving it a sharp shake. If nothing comes out, it's ready. If something does, leave the frame for the bees.)

Shaking, brushing, escape boards, fume boards and blowing are among the methods used to remove bees from the honey supers. One of the best for a hobbyist with a hive in the garden is an escape board.

With one or two escape devices, bees can leave the super but not return. Normally, an escape board will simultaneously clear four supers of 90% of bees over 48 hours. The remaining bees can be removed with a brush, and deposited back into the hive entrance.

Techniques if escape boards seem ineffective.

- **There are open or capped brood cells in any of the frames.**
  Run the hive tool through them. Frames with patches of worker brood should be moved to a lower super.
- **The supers are not completely sealed.**
  Seal any cracks or holes with tape or foam plastic to prevent robber bees removing any honey.
- **The hive is congested.**
  Add another spare super below the escape board.
- **The queen is in the honey super.**
  Gently puff a little smoke over the super before removing it. The queen will quickly move out.
- **The escape is blocked with burr comb or dead bees.**
  Crack supers joined with burr comb, a day or two before putting the escape-board on so the bees clean up any honey.

Hives are best worked in the middle of the day when the field bees are out working. Early morning or late evening is when bees are most defensive, but beekeepers with hives near houses must compromise and work when neighbours are least disturbed.

I find it easier early in the morning (6am). It is cool and the bees are not normally flying. A puff of smoke in the entrance and under the lid quietens them down and stops them rushing out. The hives can be inspected, escape boards fitted and the hives put back together before the neighbours are even out of bed, giving the bees time to settle before there is any movement in the neighbourhood.

Extracting honey is a messy business requiring lots of newspaper - and twice the time first anticipated. Speed up the work by combining extraction with another beekeeper. Other tips include:

- Use a sharp knife and keep all windows and doors closed.
- Remember that extracted honey supers attract every bee in the neighbourhood, resulting in a robbing frenzy, stings and complaints to the council.
- Put wet supers back on the hives in the evening when all bee activity has ceased, either to clean out or refill if the flow is still on.

Queens

Queens are easier to obtain and introduce at this time of the year so consider re-queening your hives in late summer. Queens are ideally replaced each year (less swarming and more honey) but most beekeepers get new ones every two. Regular replacements result in more profitable, more easily-managed spring hives.

As hives are checked, mark any not producing much honey, any with frames of pollen in the brood nest and those with a spotty brood. Re-queening all the swarms retrieved this season should also be considered.

I age queens in two ways. Any I come across and the outside of the bottom super are marked with a water-based paint poster pen. I also look at the brood patterns.

To determine how the queen is laying, I look at the open brood. A new queen lays in nearly all cells so its brood will be at the same stage of development. If you have all ages scattered through a brood, consider replacing the queen.

Re-queening is something many beekeepers have trouble with. Locating the old queen can be a problem and dark queens are almost impossible to find because they run (a relic of the old days when bees that ran out of skeps lived, while quiet, steady bees were sulphured).

Using little or no smoke, go carefully through the hive in the morning. Do not bump the hive.

Remove any honey supers (cover to prevent robbing), then, starting at the sunny side of the hive, remove the frames until you reach the brood frames. Look down on the exposed surface of each frame. The queen is larger and can often be seen scurrying away from the light. Remove the frame, look on the surface of the next frame, then examine the frame in your hands.

Look for a space among the bees on the frame. The queen should be in the middle of one of these. Once found, put it into a four-frame nuc (two frames of honey and two of brood). Then you still have a queen, should a hive fail to accept the new one.

Wait a day, then put the enclosed queen cage into the hive, just above the brood nest. Four days later, go through that nest and remove any queen cells. Then release the candy cover on the cage.

A queen excluder can be placed between the two bottom supers of the brood nest if the queen cannot be found. Wait four to five days and look for the super that has eggs in the brood nest. The queen will be in this portion.

If it still can't be found, move this part of the hive to another location and re-queen the half left on the old site. As a last resort, a queen excluder could be placed between the floorboard and the first super and all the bees shaken out in front of the hive. After a few hours, all the bees will have gone back inside but the queen should be with a small group on the underside of the queen excluder.

Once the new queen starts laying, kill the old one and unite the portion of the hive, using sheets of newspaper.

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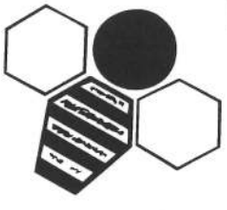

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Residue Testing to meet EU requirements.

from Lin McKenzie

Residue Testing to meet the requirements imposed by the EU is no longer seen by the Executive as their responsibility. This is a summary of the train of events starting at the October 2000 Executive meeting. Action point 2.7.8 (Exports): "NBA to write to MAF and tell them that the NBA will not be paying for EU testing and any past memos of understanding are now withdrawn."

Our Exec Secretary sent the following letter to MAF on 29 November 2000.

National Chemical Residues Monitoring Programme For Honey

"Further to our telephone conversation of 28 November 2000 I write to confirm that the National Beekeepers' Association is not prepared to be responsible for this work in the coming year.

The Executive has discussed this issue and are of a mind that this work does not fit within the NBA's role. Therefore the NBA withdraws any previous understandings regarding this programme.

We are keen to discuss this issue with you and look forward to meeting at 8.30am on December 7 to progress a solution."

On December 8 our President sent this letter to exporters.

"The National Beekeepers Association has recently held discussion with MAF Food regarding who pays for the honey sampling programme required for exporting to the European Union. The NBA position is that this is not the Associations role. There is no legal basis for the NBA to collect the current EU levy.

This obviously leads to a problem for the coming year and beyond. To help facilitate a resolution, the NBA is co-ordinating a one day meeting of all those who export honey or bee products in Wellington before Christmas. At this meeting, the NBA will state our position and MAF will outline the requirements for the coming season.

We anticipate that a resolution will be found to fund arrangements for this season only. This is seen as a temporary measure. Next year MAF, in consultation with exporters will be implementing a regulatory regime for the testing programme and payment of.

The Association will meet costs associated with the venue, morning and afternoon tea and lunch. Travel will be the participants' responsibility. The NBA will also provide an independent facilitator for the meeting.

As an exporter or an agency with an interest in this issue you are invited to attend this meeting."

STOP PRESS

At this meeting, held December 19, it was arranged that "the NBA President will discuss with the NBA Executive for their approval that: The NBA will administer through a totally separate accounting system a voluntary levy system. There will be a levy (to be worked out) on each kilo of exported honey. The levy will be structured to ensure that it covers all costs associated with running the scheme, i.e. collection of samples, testing of same, NBA time etc. The NBA will report basic statistics to the membership through the *New Zealand Beekeeper*. It was acknowledged that the EU Testing Programmme for 2001 must not end up as a cost to the NBA." The President put the proposal to the Executive. The Executive voted to maintain the position taken in October and declined to approve the proposal.

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Insuring Your Assets

from Lin McKenzie

We hear every now and then about someone being burnt or flooded out and then finding their insurance cover is not all they had believed it to be. I see this sort of scenario as an area to address as part of my support portfolio, hence this essay.

In essence, when you buy insurance you are laying a bet that you will be confronted at some time with a disaster. The insurer assesses the possibility of that occurring and the likely cost of restoring you to a situation where you are no worse off once the dust has settled. Difficulty arises when you assess the premium costs against what you believe are the chances of something going wrong. Don't be parsimonious, the best you can hope for in this world is to get what you have paid for. This is a time for pessimism, to cover for the worst case scenario – so cover all scenarios.

I carry insurance to cover full replacement value of every five-story hive, anywhere in New Zealand. My insurer is fully aware those hives may be fully assembled for only a few months of the year and the boxes are stored in a shed for the rest of the year while the bees, brood boxes, lids, floors and so on remain on land that does not belong to me.

Beware of the averages rule. If you only insure 50 % of the value on the argument that it is impossible to lose everything at once, the insurer is obliged to meet only 50 % of your claim. In the event your shed burns down and you lose all your honey supers, what are your chances of taking full advantage of the following crop if you can only replace half your boxes?

Loss of profit or interruption of business cover is vital. Some years ago, I had an apiary washed away in a late-December flash flood. The insurer accepted a claim for the full value of all 17 hives as the supers were on. It then advised me I was insured for the loss of crop, although the flow had yet to take place. Because of the rain that led to the flood, hives in the area produced hundreds of kilograms of honey and that was the basis settled on.

If you lost your extraction facility to fire and had to stand in a queue somewhere else, to what degree would your production suffer if you ran out of boxes? Even a breakdown in your shed that holds you up for a week at a crucial time can cost dearly and lead to a loss-of-profit situation. If your box shed burnt down in early November could you get new boxes assembled and frames waxed in time to go on the hives? A big ask, even with the best neighbours in the world.

Stock on hand needs to be thought through carefully. You could conceivably have your years trading stock in one place in, say April. If you pack it all it may be the following January before you have a nil "stock on hand" figure. I recognise that drums of honey may not be at great risk from fire, but there are other hazards out there, such as theft.

I blew a front tyre with five tonnes of comb honey aboard. No harm done, fortunately, but when I checked out my insurance I found there was a maximum cover of $5000 for goods in transit. And it wasn't easily changed either!

On the subject of vehicles, we have had a checkered career with insurance. Someone once tied a towrope on the chassis member carrying the radiator and gave it a good heave. The radiator moved ahead and pulled a hose off and we cooked the motor. Insurance rebuilt it at a $5000 cost. Currently we have a diesel truck with bent conrods after it got out of its depth in an irrigation race. The discussion with the insurer is centred around the extent to which it will be repaired, not whether it will be.

Sickness or injury can be devastating. Will ACC cover the cost of employing someone to carry on if you break a leg? What will happen in the instance of an extended illness? Don't bet on your continued good health. Assess the risks and do it realistically. Ask your insurer, it may not be as costly as you imagine.

Honesty pays. Some years ago my son, on his way to work, crashed his car which was insured under our policy. He had had a couple of beers the night before and said so on his claims form (inside the previous 12 hours you see.) All sorts of red lights at the insurer's office were turned on, until it was assured he had two meals and a six-hour sleep during that 12 hours. The point is, eight years later the insurer quoted this when accepting a different claim, saying if we told the truth on one occasion, it was accepted we were telling it on another.

We insure through a broker who deals with several companies. He shops around every so often to make sure we are getting a good deal. We spent some considerable time with him, making sure he understood our business and in turn he has made sure we understand the intricacies of the insurance world. Our insurance does not come cheap but with 17 hives at 100kgs, plus the capital value of the hives certainly meant we came out ahead after the flash flood.

NZ pseudoscorpion find

Could the Varroa have a natural enemy in New Zealand? A pseudoscorpion was found in a Canterbury beehive, reports Barry J Donovan from the Canterbury Agriculture and Science Centre.

An article I wrote in the July 2000 issue of *The New Zealand Beekeeper* stimulated some interest in South African pseudoscorpions as possible controllers of Varroa and other mites in beehives. The question was raised that our hives might already harbour an occasional native pseudoscorpion. In September 2000, Richard Bensemann phoned from Airborne Honey at Leeston, Canterbury, to say a pseudoscorpion had been found on a sticky board from a hive being surveyed for Varroa (Fig 1).

(Fig 1)
The pseudoscorpion *Thalossochernes tairensis.* Length 4.6mm

I forwarded the creature to Dr Brendan Moyle at the University of Massey at Albany, North Shore City, and he identified it as *Thalossochernes tairensis.* A native species, found from Northland to Otago and also the Chatham Islands, it is common under bark and in leaf litter and sometimes gets around by phoresy (ie hitching rides on insects).

Because this pseudoscorpion is a native and therefore has no long-term evolutionary history with honey bees, it is extremely unlikely it could live right among them in the way some South African pseudoscorpions do. On the sticky board, the pseudoscorpion was just on the edge of the litter fall from the bee cluster, suggesting perhaps it fell from the hive mat, or from a comb just outside the bee cluster.

How did it get inside the hive? Perhaps it somehow latched on to a bee in the field and rode it back into the hive, or perhaps it just crawled in looking for concealed areas that might harbour prey such as mites and small insects.

But even if our hives do occasionally host pseudoscorpions, because of their small size and lack of a long association with honey bees, there would seem no possibility they could be harmful to bees, nor could they predate upon Varroa living among bees. However, perhaps Varroa that stray outside the bee cluster might be preyed upon.

I would be most grateful if any pseudoscorpions found in hives were sent to me. There is always a possibility other species may occur in our hives. To catch a pseudoscorpion, just put a piece of cellotape down on it, make a fold back over the pseudoscorpion, and post it to me. In due course I will report any new findings in this journal.

Barry J Donovan, Donovan Scientific Insect Research, Canterbury Agriculture and Science Centre, Private Bag 4704, Christchurch.

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There is considerable interest in borrowing the magazines which the library receives. Unfortunately, very few have been sent my way in recent months, so this is a plea for magazines such as *Bee World, American Bee Journal, Australian Beekeeper* etc to be forwarded to the library if you have them on hand.

The number of missing magazines is in the "dozens and dozens" category - not just a few. For some of the magazines, only one of all the copies published in the year 2000 reached the library (or, in some cases, none!). Please look on desks, under couches, in trucks etc and mail them to: Beekeepers Library, c/- 43 Princes Street, Waikari, North Canterbury 8276.

It may be possible for some purchasing to be done this year. If you have seen or read books you'd recommend, please let me know.

- Chris Taiaroa

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Contact: Maggie James, 21 Humboldt St, Christchurch 8002. Phone: (03) 337-2421

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Enquiries welcome to club secretary, Dorothy, Phone (03) 488-4390

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