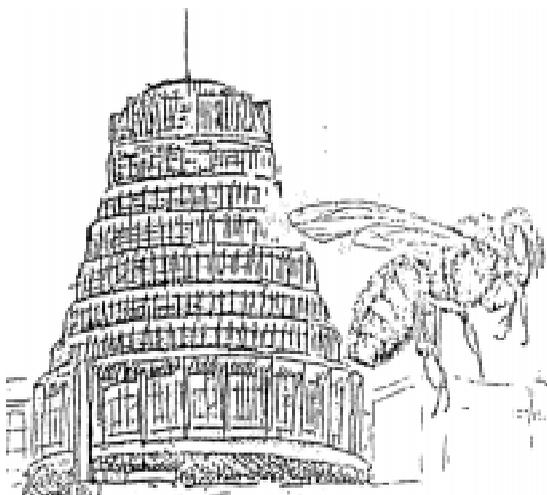


Wellington Beekeepers Association Inc.



Our Next Meeting:

When:

**Monday 8th May 2000 at
7:30 p.m.**

Where:

**Terrace Centre,
Union Church,
Dr Taylor Terrace.
Johnsonville**

Theme:

**Varroa - Identification,
Eradication or Treatment**

Note earlier start time!

Meetings are held on second Monday each month (except January), at above venue

**Wellington Beekeepers Association Inc.
Monthly Newsletter – May 2000**



This newsletter is available to members via e-mail using Adobe Acrobat v3 format.

The reader software is available from Adobe free of charge. Contact editor@beehive.org.nz for additional details.

Return Address: PO Box 11-089, Manners St., Wellington (Ph 565 0164)

Minutes of April Meeting

PRESENT : Richard Hatfield (Pres.), John Burnet (Sec.) and 30 members and visitors as listed in the attendance book.

APOLOGIES : Cliff Hulston, Ross Jensen, Bill Allan, Ray Baker, Vicki Alexander, Wayne Wild, John Wallace, Frank Clark, Keith Huntingdon, Mary Ann Lindsay.

NEW MEMBERS AND VISITORS : John & Jill van Northwick

MINUTES OF PREVIOUS MEETING : Minutes of meeting held 13 March as detailed in April newsletter were confirmed.

MATTERS ARISING: Deca Training/Exam: 25 attended training session and exam held Sat 1 April and 20 passed. Latest NBA statistics indicate there are now 2633 DECA approved beekeepers 45% of NZ's 5800 NZ beekeepers, 260 of these having passed the exam. It was agreed that the free exam offer to members would apply for the remainder of this year only. The Club will need to agree if this arrangement would be continued next year. All members expressed their appreciation to Frank Lindsay and Andrew Beach for their time and effort as course instructors.

Members were reminded that the Apiary Levy (applicable to beekeepers with more than 3 apiaries or more than 10 hives) was due by 30 April 2000.

TREASURER'S REPORT : Working account balance \$2259.50 and details of all recent deposits and cheques issued totaling \$650 were outlined to members. Other balances were \$3,105.81 (Goal Saver) and \$330.68 (BL account).

CORRESPONDENCE : Letter received from Upper Hutt City Council inviting the Club to participate in the Summer Carnival in February 2001. Issue will be further discussed at a later date.

The issue of participation in the Upper Hutt Science Festival Thurs 20 - Sun 22 July was again raised and retired or nonworking members assistance requested to assist in staffing the club stand.

GENERAL BUSINESS : Issues discussed -

Doug Purdie's surplus plastic jars available through Frank - 102 x 750 ml at 90 cents each.

Cheap paint for beehives currently available through most hardware shops - cost usually \$45 - \$55 per 10 litres assorted colours.

Richard Hadfield advised his wax dipper would be available shortly - cost \$5 per box which preserved box for approx 10 years.

Requeening now too late as queens generally unavailable and climate too cool . Members should order now for spring requeening.

Wintering down should be underway - hive entrances should be reduced, floorboards scraped, and mouse or rat bait placed underneath.

Empty supers should be stored and stacked with PDB crystals placed on top super to prevent wax moth infestation. Crystals will vaporise and gas being heavier than air will filter down through the stack.

In response to a member's question it was confirmed there was no truth to the belief that beekeepers should not donate blood. Regular receipt of bee-sting venom did not damage or contaminate human blood.

A 1982 British video on AFB and EFB was shown. Obvious differences noticed when compared with NZ - acceptance of scorching hive parts instead of total hive destruction and use of drugs to control diseased hives.

HONEY COMPETITION :

Liquid Honey : 1st - John Robson (hedge honey with taste of blackberry)

2nd - Wrae Duncan (pasture honey)

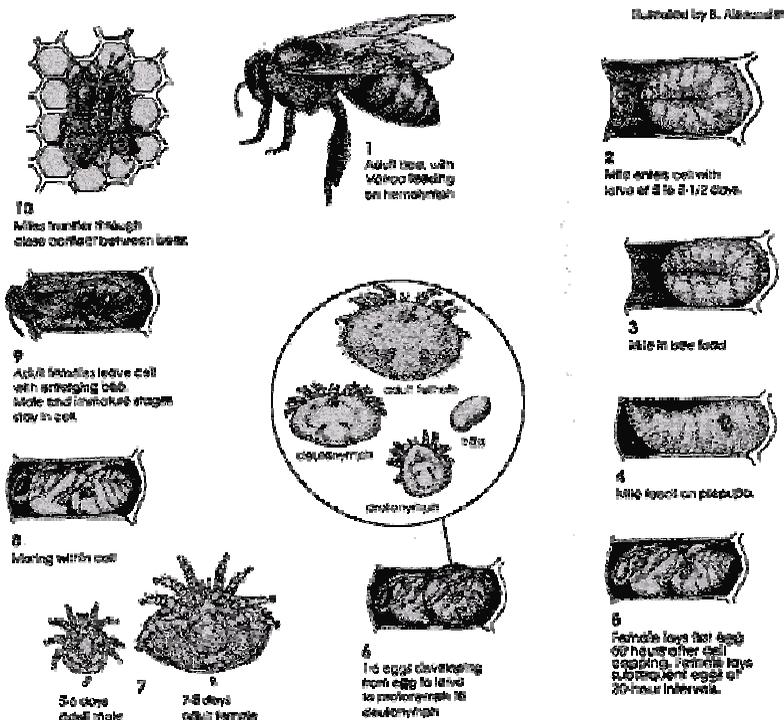
3rd - Fritz Fuchs (clover based honey)

Ivan Pedersen was commended for his perfect honey frame (ideal for comb honey)

Meeting closed at 9.30 pm with usual supper.

John Burnet

The Varroa Lifecycle



The Varroa Mite: some questions and answers

What is this mite? The Varroa mite (*Varroa jacobsoni*) is an external parasite of honey bees that attacks adult bees and their developing larvae, or young.

Why are we worrying about it? It weakens colonies and can kill them.

How does it travel? The mite can spread quickly to other bee colonies by travelling with swarms or migrating bees, and by the movement of infested equipment. Varroa depends on adult bees for transport, although the principal way in which mites migrate being moved when the beekeeper shifts bees, hives and equipment over long distances, often unaware of mites' presence.

Does it harm humans or livestock? No.

How long has varroa been here? We don't know for sure, but it has probably been here several years.

How did varroa get to New Zealand? At this stage it is unknown how the mite arrived in New Zealand. It is usually spread by live bees, and there have been no live bee imports permitted into New Zealand for at least 40 years to protect our bee health status.

How long does the mite survive away from bees? About a day.

Do they come on honey? No. There is no possibility they could have come in through honey imports. Varroa has no known host other than the honey bee

Where did varroa mites come from? The mite originated in eastern Asia and spread into Europe via Russia. Since the 1980s it has been carried into most other beekeeping regions of the world, killing thousands of colonies. See the animation.

How do they spread internationally? There is international trade in live bees. Queen bees are shipped world-wide, and are believed to be responsible for the spread of the mite from Europe to both North and South America. New Zealand has not permitted imports for many years, but does export live bees.

Why are bees moved within a country? Beekeepers shift their hives long distances to pollinate crops, or gather honey. This enabled varroa to spread throughout the USA within a few years of being introduced.

Well, if you restrict the movement of bees, can you slow down varroa? Yes. Some European countries, which have strictly controlled the movement of bees, have managed to greatly slow the spread of varroa.

What are we doing in New Zealand to control varroa? The entire North Island of New Zealand has been declared a controlled area by the Ministry of Agriculture and Forestry to stop the spread and movement of the varroa mite. The Ministry envisages that the movement control provisions will be reviewed by 28 April 2000, at which time the results of the hive testing in the Tauranga and other district apiary zones, will be known.

Until further notice, certain items listed below cannot be moved within or from any part of the North Island, without the permission of an officer under the Biosecurity Act 1993.

Anyone wishing to obtain permission to move one of the controlled items should telephone (09) 265-9395.

What items can't be moved? *Honey bees*, including package bees, queen bees, and the whole or any part of any dead honeybee. *Beehives* - or any thing that is being or has been used for the keeping of honeybees - including nucleus beehives and any part of any beehive, including frames, boxes, lids and bases, and supers of honey. *Used beekeeping equipment* - meaning any thing that is being or has been used in connection with beekeeping.

Is honey restricted as well? The notice does not impose any restrictions on the movement of bee products, or honey that has been removed from a beehive and processed.

What penalties are in place? Failure to comply with the movement control conditions is an offence under the Biosecurity Act 1993. The penalty for non-compliance is up to five years imprisonment or a fine of up to \$100,000 for individuals.

What are the possible consequences on the bee population? The whole bee population is at risk of getting the mite. Numbers of mites in a colony typically build up over several years, and untreated colonies die. The mite could affect wild (or feral) bees as well as those kept by hobbyists and commercial bee farmers.

What should beekeepers look out for? Infected hives may show the following signs:

- Unexpectedly low bee numbers
- A patchy pattern on brood frames as would be seen with a heavy sacbrood infestation
- Small reddish-brown mites on the bodies of bees, and on uncapped drone pupae
- Weak crawling bees, possible with deformed wings
- Sudden hive crashes.

What could the impact on agriculture/horticulture be? It is likely to be significant. A group in MAF is assessing this at the moment.

How do other countries manage varroa? If varroa is established in a country, a successful approach for the beekeeping industry is likely to include:

- not destroying infested hives;
- developing smart movement controls and applying them judiciously;
- very promptly getting overseas expertise to upskill the industry (and regulators) on what management and regulatory approaches to take;
- continuing with extensive surveys to monitor the spread of varroa and alert beekeepers to the need to control;
- putting a lot of resources into beekeeper education on management and control;
- working out ways to coordinate control on an area basis;
- in future, carrying out research to identify the best management practices controlling mites under local conditions;
- taking a strategic approach to registering chemical controls.

www.maf.govt.nz

The Powdered-Sugar Shake: Detecting Varroa Without Killing Bees

While seeking ways to recover varroa mites from bees for laboratory assays, Paula Macedo, a University of Nebraska Graduate Student, found a new way to check colonies for varroa that is more efficient than ether roll. In addition to being more efficient, it is not necessary to kill bees to conduct the test.

You will need the following:

1. A wide mouth canning jar (quart or pint) with two-piece lid.
2. #8 mesh hardware cloth (or any other mesh that will retain the bees while letting varroa pass through).
3. Window screen (or any other fine mesh hardware cloth that will let powdered sugar pass through but retain varroa.

Retain the metal ring that comes with the two-piece lid, and discard the centre portion. Cut a circle of #8 mesh hardware cloth to fit inside the ring. Collect 200-300 bees in a wide mouth pint or quart canning jar. Add powdered sugar to the jar through the #8 mesh lid (enough to coat the bees, 1 tsp. to 1 tbsp. should be adequate). Roll jar around to distribute the sugar. Allow the jar to sit for a few minutes while you collect additional samples. Then invert the jar and shake to recover the mites. The bees will remain in the jar, and the mites and sugar will pass through to a piece of paper. The sugar will make it difficult to count the mites. You can pour the sugar and mites into another jar with a fine mesh lid. Shake again and allow the sugar to escape. Then, dump the mites on a clean sheet of paper and count them. A brief shaking will usually recover 70% of the mites. If you persist a little longer you can recover 90%.

We can think of three possible reasons for the efficacy of this technique:

1. Varroa mite legs have a sticky pad called the empodium that helps them adhere to their host. The presence of powdered sugar could make it difficult for mites to adhere.
2. Powdered sugar stimulates the bees' grooming behaviour.
3. The powdered sugar on the mite's body stimulates mites to release from feeding to groom themselves. Let us know how it works for you. It may be a problem in a windy Nebraska bee yard, but it works well in a lab.

Powdered sugar applied to a colony will dislodge a few mites from their host bees, but it is not highly efficient. Furthermore, the mites will eventually recover and return to their hosts. However, when bees are isolated from nest materials, the mite recovery from exposing them to powdered sugar is impressive. In fact, if you are willing to collect the adult population of a colony in jars and subject them to powdered sugar shaking, you can lower the mite infestation comparably to a chemical treatment. Continue shaking until mites cease to fall, and then return the bees to their colony unharmed. In future studies, we will examine the efficiency of the technique in bulk bee cages. One limitation to using this technique is that it is only efficient when brood is not present. When brood is present, 70 - 80% of the mites will be in sealed brood cells.

[New Zealand Beekeepers List](#)

SECRETS OF BEES - from Walt Disney's 'World of Nature', 1965

Part 2 (Continued from last month)

BUILDING THE HIVE: The trick is performed by younger bees under 17 days old, which have not yet reached the field bee stage. If the comb is new, and there is no old comb to enlarge, they hang themselves in festoons from the roof of the hive or the hollow in the tree. One hooks its claws to the roof and another hooks on to the hind legs that dangle down. They look like watch chains looped from the ceiling. More and more bees hook their front legs to the hind legs of those above. The chains grow longer. As they sway and touch, the bees hook on right and left, forming a living curtain. Nobody knows why they hang up in this way, but the wax seems to come faster when the body is stretched out.

On each side of the abdomen are 4 wax pockets. After 24 hours of hanging, tiny slips of wax begin to appear, like letters stuck in their pockets. When a bee feels its wax ready to come all the way out, it takes the letters out of its pockets, chews them, and pats on the wax where the comb is to be built. Sometimes the wax scales come fast, especially if many bees have hung themselves up at the same time. Wax scales litter the floor. The lowest bees let go the legs of those above, drop to the floor and pick up the wax slabs, taking them to the new hive walls.

Wax is reinforced by drawing long thin threads of varnish through it. The wax hardens around the threads, like concrete reinforced with wire. As cell walls are only 1/350th of an inch thick, it would be impossible to see a thread so fine. This makes a sharp edge and since bees are constantly on the move on the face of the comb, the top edges must be thickened. Extra wax is dabbed on, giving the walls a rounded coping. When making the cells, bees start by just piling on wax, laid on like mud when a swallow builds a nest. The holes begin as rough cups, pressed in by the bee's body, and the cells will always be that size and exactly fit the shape of the bee. The work of shaping and finishing the cells is done by lots of bees in lots of holes, all pushing simultaneously against each other. They use heads, feet, bodies - smoothing, scraping and ramming home the wax, which is kept warm by their bodies.

To prove that a bee never digests its food all alone, but rather that the whole hive digests food together, scientists fed six bees in a hive of 24,500 radioactive honey. After two days, all the bees in the hive were radioactive, from passing the treated honey from mouth to mouth.

Vicky Alexander

Apiary Levy Payments

Don't forget - unless you have obtained an exemption, your Apiary Levy was due by 30th April. The NBA is hoping that those beekeepers who are eligible for an exemption will choose to pay the levy and support the association. Please consider doing this.

James Scott

Farming Lifestyle Show

The Wellington Regional Council is sponsoring a show / field day for the public with an interest in rural activities on Sat 13th May at the Otaki Racecourse. This is an opportunity for the club to mount a stand about bees and beekeeping in order to educate the public, gain new members, and sell some produce.

If anyone is interested in attending to do this, come to the meeting on Monday 8th, or contact Richard (528 7780), Frank (478 3367) John (232 7863) or James (565 0164).

Annual Subscription

A proposal has been made that members who elect to receive newsletters by e-mail rather than standard post, will be offered a \$5 rebate on their \$20 annual membership fee. This allows for the fact that newsletters sent by e-mail do not incur either printing or postage costs.

If you would like to receive your news-letter by e-mail, then please indicate when you renew your membership shortly, and supply your e-mail address to editor@beehive.org.nz

Mead Competition

Don't forget that the annual mead competition is coming up, and will be held in July with our AGM. Members wishing to enter should be preparing their mead now.

Entries will need to be submitted in clear round bottles of either 375 ml or standard 750 ml size. There are three classes: dry, sweet, and sparkling.

Future Meetings

The committee is looking for interesting and/or relevant speakers for meetings this year. If you have any suggestions please contact our secretary, John Burnet on 232 7863 (or secretary@beehive.org.nz).

June (12th): Mary Byrne (Anti Fluoride campaign)

July (10th): Annual General Meeting and mead competition

August (14th): (to be advised)

For Sale & Wanted to Buy

- Plastic screw-top jars, 500gm size, 102 available. Retail at \$1.07 each. The lot for \$98, or 90 cents each. Phone Frank on 478 3367.
- Wanted: clean beeswax - \$5.00 per Kg; bulk honey - 20 litre pails (supplied) - price after examination. Phone Ivan 526 9180

Don't forget when selling any used hive gear, the seller must inform AgriQuality in Palmerston North, so it can be tracked in the case of an exotic disease outbreak. Purchasers should sign the form supplied by AgriQuality.
