

September 2013

Wellington Beekeepers Association Incorporated Newsletter

Next Meeting: Wednesday 4th September 2013

Main Hall, Johnsonville Community Centre, Moorefield Rd.

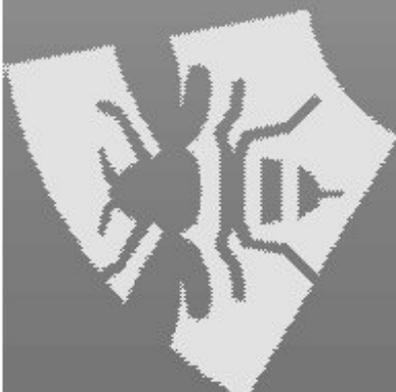
7.30pm - Main Meeting

**Spring Tasks
Viv Harris on Skin Care
Products**

**7.00pm - Beginners Session
(In upstairs Trust Room)**

**Personal Safety Equipment
Time Requirements**

Return address: 280 Major Drive, Kelson, Lower Hutt



WELLINGTON BEEKEEPERS ASSOCIATION



Meetings Johnsonville
Community Centre
Main Hall, Ground Floor,
Moorefield Road

1st Wednesday of the month
Main Meeting @ 7.30pm
Beginners Tuition @7.00pm

WHO TO TALK TO

President

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Newsletters are published in the **last week** of each month, except January.

Members contributions to be with editor **by 20th month**.

Please submit articles in Microsoft Word document format.

If recommending articles from the web, please confirm whether these can be reproduced or have copyright.

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Useful Websites

Club Website: www.beehive.org.nz

Club Library: <http://www.librarything.com/>

Username: wellingtonbeeclub

Password: buzz

Club Facebook: <https://www.facebook.com/wellingtonbeekeepers>

Federated Farmers Bee Industry Group Trees-For-Bees Website:

Lots of information and planting guides for different areas of the country

<http://www.fedfarm.org.nz/membership/Industry-Groups/Trees-for-Bees.asp>

New Zealand Beekeepers Forum

Lots of information if you are used to on-line forums:

<http://www.nzbees.net/forum/> No login required to browse.

Bayer Bee Care Website online

Find all the information about Bayer's commitment to bee health:

<http://www.beecare.bayer.com>



MINUTES OF THE WELLINGTON BEEKEEPERS' ASSOCIATION (WBA) MONTHLY MEETING HELD AT THE JOHNSONVILLE COMMUNITY CENTRE, WEDNESDAY 7th August 2013, 7.30 pm

Present: James Scott as acting President and members.

Apologies: Richard Braczek

Visitors/New Members: 74 members and 11 new people introduced themselves.

Matters arising:

Wainuiomata WBA Member Hive Box Workshop

Bee Box building workshop will begin at 1 pm on Sunday 11th August at Wayne Wild's, 206 Coast Road, Wainuiomata. Bring a plate for shared afternoon tea.

New Western Wellington Support Group

John Randall announced the 1st meeting of subgroup at 10:00 am on Saturday August 17th at 216 South Karori Road. People with all levels of beekeeping experience are welcome. Bring a plate to share. For further information call John on 04 476 9959 or email westernbeeline@gmail.com

What's happening in the Hives?

James inspected two hives recently. One had starved over winter and the other was humming and strong. It had fresh nectar and stores of honey. He was curious as to why the weaker hive had refused to take up the syrup that he had offered through winter. He guessed that the bees had associated the syrup with an oxalic acid treatment that he had applied in the autumn, and had decided to refuse the syrup.

Q: Can you give bees too much syrup?

A: No, they just store any surplus.

Q: What do I do with a queen that is laying two eggs in each cell?

A: Replace her. She has probably lost the ability to control her ovipositor.

Q: What is a diploid queen?

A: One that is fertile and can lay worker eggs with 32 chromosomes. A haploid queen is only able to lay worker eggs with 16 chromosomes because she has run out of stored sperm. She should be replaced. (During the meeting a different answer was given. The minutes have been changed to reflect the correct answer.)

Q: What is the best concentration of syrup to feed in the spring?

A: No stronger a ratio than 1:1 white sugar to water so that the queen is stimulated to lay.

Q: When is swarming likely to begin?

A: In about a month's time. When the cabbage tree flowers, good sources of both pollen and nectar are available to bees and swarming begins.

Q: Has anyone uncapped honey with a heat gun.

A: PK Tan said that this method can be used successfully if the wax is fresh and not touching the honey?

Q: What kind of arrangements are made when one has a hive on someone else's property?

A: Andrew Beach offered to discuss this one-on-one with interested members.

Spring varroa treatments

It's time to treat for varroa using all methods. If using strips, they can go in and be taken out in plenty of time before the honey flow.

How to use oxalic acid and formic acid

Tony Coard presented a document that Anne Noble has created outlining how to use oxalic acid and formic acid. Copies were available to members.

Additional low level varroa treatment

Tony Coard reminded members that they can use a 1:1:1 ratio of honey, wax, and food grade mineral oil. This is applied to cotton cords and acts as an additional low level varroa treatment during the summer. Soaked cords/cloths are placed on top of the brood box. The bees smell the honey and come to remove the cords. While collecting the honey they get coated in mineral oil and this smothers the varroa.

Tony's group has developed a good system to saturate Chux cloths with the solution and will make this treatment available to club members for a small cost.

MAF Varroa Book

John Burnett advised that the Varroa Control book by MAF will be reprinted within the next couple of months. He still has available copies of the current 2007 version.

Labels for Honey

Anthony de Vries of Anco Print Ltd spoke to the WBA about his printing business. During the last few years he has been making a lot of honey labels for beekeepers. He is happy to do small runs of labels for hobbyists. For the best printing deal he suggests that people get together and order small runs. His estimate cost for a generic label is 10-15 cents a label. He is working closely with Arthur Holmes (the retailer of containers and lids in Newtown). As well as printing, he has just been granted the rights to produce electronic books on beekeeping. Anyone interested in purchasing electronic beekeeping books, see John Burnett. Two examples of available texts are: the UK Beekeeping Magazine with 120 colour pages, and a modern edition of The ABC and XYZ of Beekeeping, first published in 1877. Anthony is also interested in partially sponsoring a book including recipes and medicinal uses of bee products.

Anco Print Ltd is located in Alicetown, Lower Hutt. Phone 566-1700 or www.ancoprint.co.nz.

Member Offerings to other Members

Stewart Knowles is offering two FREE industrial plastic pallets to club members.

John Randall offers FREE plans for the bottom board that he has developed.

John Randall offers eyelets to assist in wiring frames.

John Randall offers wire stretchers for \$30.00

John Randall offers the tip of placing a rubber band on each end of the wire to prevent it from unwinding into an unmanageable wire nest.

Luc Potion offers 65% dilution of formic acid at \$8.00 per litre. Supply your own bottle.

Andrew Beach offers \$30 bottom boards.

Camp Rangi Beekeeping Workshop

There are 10 places left for the 6-8 September workshop. For information contact Camp Mother Mary-Ann Lindsey 04 478-5039.

Gizmos and Gadgets

Andrew Beach demonstrated his technique for building bee boxes using a homemade wooden brace below and a plastic wood clamp from Mitre 10 Mega. He used these to square up the box and to support the wood while he drills 5 screws in to each corner. An advantage of using screws is that the wood doesn't warp.

Peter Northcote demonstrated using a silicone baking sheet that he cut in half to assist in the process of melting wax on to frame wires. Once the wax foundation is aligned in the frame, he places a silicone sheet on either side of the foundation and places it in the jig. A wooden weight is placed on top and under the wax foundation. Then a 12 volt current is run through the wire to melt the wax onto the frame's wires. The advantage of this method is that the wax foundation will not melt through and fall off the wires.

He also demonstrated a prototype oxalic acid distribution system that has been masterminded by Lisa Northcote. It is an aluminium cup attached to the end of a long handle. The 2 grams of acid are placed in the cup. The handle allows the cup to slide under bottom box beneath the mesh in the baseboard. The handle has two leads that can be attached to a 12 volt current. When the electric current runs through the wires, the acid in the cup heats up and the fumes rise up into the hive.

John Burnett showed how to extend short gloves to protect wrists and elbows from bee stings. He displayed clear industrial sleeves that are elasticised on both ends and can be purchased from any safety shop.

John Burnett also showed a wooden extractor stand that Allan Lawrie of Grenada designed and built for the club extractor. It serves 3 purposes: 1) raising the height of the extractor so that a 20 litre bucket could easily fit beneath 2) stabilising the extractor while the centrifuge was being activated and 3) maximises the honey's draining from the extractor drum by creating an angle.

Gary showed his homemade bee box painting device made from wood and a Lazy Susan. A box sits on the base and spins so that it that can be quickly painted with a roller. He purchased the Lazy Susan for about 12 dollars from Precision Bearings.

Andrew demonstrated his brad gun that he made from a refrigerator compressor and an LPG cylinder. He places the frame components into a jig and uses the brad gun to fire 15 ml brads and make up his frames quickly.

Carolyn O'Fallon shared her timeline for a project to develop a bee website. Her objective is to have the website that will raise general awareness about and create interest in bees. If you are interested in joining a project team to support this goal, contact her by phone +64 27 2404196 or by email Carolyn@pinnacleresearch.co.nz.

Tony Coard expressed concern as Alliance has changed the direction of production and the future of frame ware may be negatively affected.

The meeting closed at 8:56 pm.

September Meeting	Wednesday 4 th September 2013
Beginners Session 7pm -	Meeting in Upstairs Trust Room Andrew will be talking on the time involved for the average beekeeper, and the Personal Safety Equipment you will need.
Main Meeting 7:30pm -	Spring Checks Varroa Treatment Viv Harris, a club member is going to show us how to make some skin care products: lip balm and hand cream, and also some bee sting remedies.

Requests to Lease a Hive

Karori

"We live in Karori on a modest 500 sqm section. I am really keen to try keeping a hive but wanted to know if I could possibly rent/lease a hive this year as a bit of a trial."

Anyone interested in helping please contact: Deborah Kent (gkent@inspire.net.nz)

Brooklyn

"We live in Brooklyn and are wondering about the feasibility of having a hive on our property. I have some fruit trees about to blossom. I am not a bee keeper and am happy to pay to hire a hive."

Anyone interested in helping please contact: Rob Young (robyoungsmail@gmail.com)

Rainbow Honey research for Varroa Sensitive Hygienic Bees

The Radio New Zealand Rural News gave an update on this research on 26 August.

To listen to the report, go to:

<http://www.radionz.co.nz/national/programmes/ruralnews/audio/2567139/midday-rural-news-for-27-august-2013>

And from the UK on similar research

Rare Cornish bee could save dwindling populations from disease

Sarah Ransome reports for BBC News

A rare Cornish bee species could save dwindling populations from a disease that has wiped out millions of colonies worldwide, scientists have said.

New research suggests the Cornish Black honey bee is better at dealing with varroa mites, which carry a strain of a disease called deformed wing virus.

The virus has killed vast numbers of the world's bees.

See the report at: <http://www.bbc.co.uk/news/uk-23298530>



Hive Sites offered

Mornington

"I was interested in seeing if I could get a hive on my section in Mornington. Maybe learn about getting my own hive one day"

Anyone interested in helping please contact: Gordon Barrell (bassplayer@clear.net.nz)

Tawa

Thora lives in Main Road Tawa and would like someone to keep bees on her place.

Anyone interested in helping please contact: Thora: Tel 2329113



Parasitized Bees Have Genes Changed, Forage Earlier, More Virus

This study from INRA (French National Institute for Agricultural Research) investigated the effect of parasitization on honey bees living in hives at Avignon. Individual bees were infected with either the ectoparasite Varroa, which lives on the bees, or endoparasite Nosema, which invades their

bodies, and reintroduced to the hive. After a few days the effect of infection on bees and their behaviour was monitored.

Parasitization caused changes in the levels of active genes in the brains of infected bees. Varroa altered the activity of 455 genes, including genes involved in GABA and serotonin signalling, while Nosema affected 57. Twenty genes were common between the two infections and several of the up-regulated genes are involved in oxidative stress, neural function and foraging behaviour. Parasitized bees also tended to have a higher viral infection as well, adding to their disease burden, -- even if they did not have physical symptoms.

Hydrocarbons on the cuticle of bees provide a 'family' scent allowing bees from the same hive to recognize each other. The levels of these chemicals was altered by infection with either the endo- or ecto-parasite. Nevertheless infected bees were treated as normal by other bees -- social interactions including antennal contact, grooming, feeding, and vibration, continued -- and they were not expelled from the hive.

Dr Cynthia McDonnell who led this study commented, "Parasitized bees tend to leave the colony earlier to perform foraging activity, which could lead to a significant depopulation of the colony. However, very few studies have analysed the impact of parasites on bee phenotypes, e.g. brain and behaviour. We found that parasitized bees were not attacked by their nest mates suggesting that they leave the hive voluntarily, perhaps in response to the changes in gene expression in their brains. This social removal and the underlying mechanism might be a general and conserved response to parasitism, given that it was observed with extremely different types of parasites"

For the full report go to: <http://www.sciencedaily.com/releases/2013/07/130717051738.htm>



Pesticides Compromise Honey Bee's Immune System. Varroa and Nosema Get Upper Hand when Bees Exposed To Poisons.

By: Alan Harman

From: Bee Culture, The Magazine Of American Beekeeping

Commercial honey bees used to pollinate crops are exposed to a wide variety of agricultural chemicals, including common fungicides that impair the bees' ability to fight off Nosema ceranae.

New research from the University of Maryland and the U.S. Department of Agriculture, reported in the online journal Plos One, is the first analysis of real-world conditions encountered by honey bees as their hives pollinate a wide range of crops, from apples to watermelons.

The researchers collected pollen from honey bee hives in fields from Delaware to Maine.

They analysed the samples to find out which flowering plants were the bees' main pollen sources and what agricultural chemicals were commingled with the pollen.

The researchers then fed the pesticide-laden pollen samples to healthy bees, which were then tested for their ability to resist infection with Nosema ceranae – a parasite that has been linked to colony collapse disorder.

On average, the pollen samples contained nine different agricultural chemicals, including fungicides, insecticides, herbicides and miticides.

Sub-lethal levels of multiple agricultural chemicals were present in every sample, with one sample containing 21 different pesticides.

Pesticides found most frequently in the bees' pollen were the fungicide chlorothalonil, used on apples and other crops, and the insecticide fluvalinate, used by beekeepers to control Varroa mites.

In the study's most surprising result, bees that were fed the collected pollen samples containing chlorothalonil were nearly three times more likely to be infected by Nosema than bees that were not exposed to these chemicals, says Jeff Pettis, research leader of the USDA's Bee Research Laboratory and the study's lead author.

The miticides used to control Varroa mites also harmed the bees' ability to withstand parasitic infection.

Beekeepers know they are making a trade-off when they use miticides.

The chemicals compromise bees' immune systems, but the damage is less than it would be if mites were left unchecked, says University of Maryland researcher Dennis vanEngelsdorp, the study's senior author.

But the study's finding that common fungicides can be harmful at real world dosages is new, and points to a gap in existing regulations.

"We don't think of fungicides as having a negative effect on bees, because they're not designed to kill insects," vanEngelsdorp says.

Federal regulations restrict the use of insecticides while pollinating insects are foraging, he says, "but there are no such restrictions on fungicides, so you'll often see fungicide applications going on while bees are foraging on the crop. This finding suggests that we have to reconsider that policy."

In another unexpected finding, most of the crops that the bees were pollinating appeared to provide their hives with little nourishment.

But when the researchers collected pollen from bees foraging on native North American crops such as blueberries and watermelon, they found the pollen came from other flowering plants in the area, not from the crops.

This is probably because honey bees, which evolved in the Old World, are not efficient at collecting pollen from New World crops, even though they can pollinate these crops.

While the study's findings are not directly related to colony collapse disorder, the researchers say the results shed light on the many factors that are interacting to stress honey bee populations.

To see the original article go to: <http://home.ezezine.com/1636/1636-2013.07.24.17.00.archive.html>



On a happier note

Retailers pull insecticides deemed harmful to bees

From New Zealand Herald Thursday Aug 22, 2013

Two major New Zealand retailers have moved to stop stocking a controversial group of insecticides over claims they harm bees.

Green MP Steffan Browning wrote to gardening companies this year asking them to stop selling products containing the chemical group neonicotinoids, typically found in bug and flower sprays.

It followed a decision by the European Commission to impose restrictions on three compounds of the chemical, for applications in cereals and bee-attractive crops.



Photo / Steven McNicholl

Placemakers has since opted to stop selling neonicotinoid products while scientific studies on the widely-used chemicals are ongoing.

The Warehouse has also decided against stocking three products after its own investigation. The company would not place any new orders of the products, and existing stocks would be sold before December, when European restrictions come into force.

"It definitely has a financial impact, but we are referring customers to a range of other products we have that are similar, but not as toxic to bees," The Warehouse environment support manager Greg Nelson said.

Mr Browning hoped other stores would follow their lead.

"The issue of bee health is critical for New Zealand as an agricultural nation," he said. "We need bees to pollinate our fruits, vegetables and even the grasses that our dairy cows eat.

"Without a healthy bee population, our very food supply is at risk."

He also called on the Government to fund a study of bee health to establish what New Zealand had to do to better protect them.

"But in the meantime there is plenty that home gardeners can do to help and the first step is to not use chemicals in their gardens that are linked to hurting our fragile bee populations."

National Beekeepers' Association chief executive Daniel Paul applauded the move.

"However, we also recognise that it's not feasible for every stockist of garden sprays to do what they are doing."

Gardeners could minimise harm to bees by not spraying flowering plants or during the day.

Despite the moves in Europe, Mr Paul had seen no hard evidence in New Zealand that the sprays were affecting bees, though there had been anecdotal reports.

"The evidence suggests there are a range of effects, and the association would like to see more work done."

Neonicotinoids

Neonicotinoid pesticides, introduced to New Zealand in the 1990s, are now one of the main crop pesticides in the world.

According to industry body Agcarm and the National Beekeepers' Association, there has been no evidence of the products having had direct adverse effects on New Zealand bee populations.

But the chemicals have become particularly controversial after the European Commission restricted their use. Contrary to some claims around the world, agriculture industry group Agcarm states the chemicals are not contributing to declining bee rates.

The group said the chemicals had been used well before the destructive varroa mite was identified here in 2000, and although feral bee numbers had been decimated, managed bee hive numbers had increased by 40 per cent between 2005 and 2013.



Manuka Honey Fraud Uncovered. More Sold Than Made.

By: Alan Harman

From: <http://home.ezezine.com/1636/1636-2013.08.26.12.34.archive.html>

New Zealand's NZ\$120-million manuka honey sector is in crisis as tests around the world find the product often has nothing but price to set it apart from ordinary honey.

All manuka honey comes from New Zealand and Unique Manuka Factor Honey Association research shows 1,700 tonnes produced each year.

But 1,800 tonnes of "manuka" honey is sold in Britain alone each year with as much as 10,000 tons sold worldwide.

Of the 73 samples of honey tested by the association, 41 failed to show the non-peroxide activity claimed for manuka honey. Hong Kong authorities found 14 of 55 manuka honey samples tested were adulterated with syrup. Other tests found some of the honey was not manuka.

The *New Zealand Herald* reports Britain's Food and Environment Research Agency tested a small sample of five brands of manuka honey from shop shelves. Only one, made by Comvita, the biggest manuka honey producer, was up to standard. The other four showed no detectable non-peroxide activity, the anti-bacterial properties special to manuka honey.

Britain's Food Standards Agency then issued a nationwide warning about misleading claims on the labels of manuka honey jars.

Manuka honey commands prices 10 to 20 times higher than other types of honey because of its anti-bacterial properties and New Zealand Food Safety Minister Nikki Kaye said on Radio New Zealand the government and the honey industry need to move quickly to set an international labelling standard.

UMF Honey Association president John Rawcliffe tells the Herald the UK crackdown was due.

"There is potentially huge fraud," he says. "There are higher and ever-increasing volumes of honey labelled as manuka which are not manuka."

"We knew we sold more 'manuka' overseas than has ever been produced . . . we've been spending everything we've got to work out how to stop this fraud, and the only negative thing is that we should have done it quicker."



And from: <http://www.stuff.co.nz/business/farming/agribusiness/9085196/Industry-knew-of-manuka-fake-risks>

The manuka honey industry body admits it could have been quicker off the mark to protect New Zealand's product, which is at the centre of an international food fraud investigation.

Britain's Food Standards Agency has issued a nationwide alert to all trading standards departments in Britain, asking them to watch out for honey labelled as manuka but derived from other sources, the Sunday Times reports.

Manuka honey sells for a big premium over other honey internationally thanks to endorsements from various celebrities, including singer Katherine Jenkins, actor Scarlett Johansson, and tennis star Novak Djokovic. A 500g jar sells for up to NZ\$90 in Britain.

But tests by the scientific arm of Britain's environment and food ministry suggested much manuka honey had nothing except price to set it apart from ordinary honey.

In October 2011 it found that from 23 manuka-labelled honeys, 11 did not show "non-peroxide" anti-microbial activity unique to genuine manuka honey.

The New Zealand Unique Manuka Factor Honey Association (UMFHA) commissioned more tests in 2012 and also this year in Britain, China and Singapore. Of 73 samples tested, 41 showed no non-peroxide activity. Separate tests in Hong Kong found that of 55 manuka honeys sampled, 14 had been contaminated with syrup.

The UMFHA, which represents New Zealand manuka honey processing companies, said it should have been more proactive about protecting the brand.

"We knew that there were problems," association head John Rawcliffe said yesterday. "We knew we sold more 'manuka' overseas than has ever been produced . . . we've been spending everything we've got to work out how to stop this fraud, and the only negative thing is that we should have done it quicker."

Its research showed that 1700 tonnes of manuka are produced here each year, compared with the estimated 1800 tonnes of "manuka" honey sold in Britain alone. As much as 10,000 tons are sold worldwide, suggesting widespread fraud.

Almost all the world's manuka honey comes from New Zealand, with the industry here worth about \$120 million.

Food Safety Minister Nikki Kaye said she was working with industry and overseas regulators, and expected a guideline to help clarify labelling issues to be developed over the next month.