



Monthly Newsletter

Issue 191 December 2020



Upcoming Events and Notices

This Club Day: 5th December

Next Club Day: 6th February 2021

Whareora Hall 10.00am

What to bring:

- Your **Membership card** to show at the door
- **Cash** for the produce table
- **Produce** for the produce table
- **Library books** you have borrowed
- **Bee suit** (Club has some for members to use also)

Directions:

From SH1, turn off to *Kensington*. Turn left onto *Mill Road*, then right at *Whareora Road*. Keep on this road until it joins *Pataua North Road* and carry on for a few more minutes.

The hall is on the right. Please **do not** park on the road, use the paddock adjacent to the Hall when the car park is full.

Farmlands Discount.

You will need to show your bee club membership card when buying at Farmlands. We had thought our shareholder discounts applied to all Farmlands products, but this may not be the case.

December Club Day

There will be practical sessions on beekeeping basics, such as building a bee box and waxing frames.

Please note due to Covid, we will not have the usual bring a plate lunch to celebrate Christmas, we will have the usual pizza delivery.

There will be no club day in January as most people will be away on holidays. The first club day of 2021 is on February 6th.

Club Day Duty Roster

Set Up Hall From 9am	Volunteer needed
Set up in Kitchen 9am and Set up Lunch	Muriel
Wash up Kitchen from Lunch	Muriel
Pack up / Clean Hall From 12-30	David P; Vince L

All of these jobs are easy and require very little time and effort, please sign up on the roster at Club Day. A big "THANK YOU" for your help.

News from last Club Day

Club Day Summary 7th November 2020

David introduced our guest speaker Keegan Blignaut from Manuka Health (Regional Apiculture Manager Northern).

Email: keeganb@manukahealth.co.nz

Here is a summary of Keegan's talk:

Commercial manuka honey production is all about the numbers.

- It costs Manuka Health \$450 to run a hive / year
- They target 500 MGO (methylglyoxal) honey as a minimum. All 5 key markers must pass the manuka test, including 2-MAP levels in Northland presumably.
- Stocking ratio (central north island) is 1 hive/hectare. In Northland 1 hive /1.5 hectares.

About the Speaker

Grew up in South Africa and came to NZ in 2014. Always been in honey. At the age of 23 had 600 hives. However imported honey from China into SA lowered the price from \$9/kg to \$2/kg, hence the move to NZ.

Manuka Health

Is now setup to problem solve. Discovered a bee gut problem when bees stopped taking sugar and pollen substitutes. Found the bees had very high levels of Nosema. There are now 3 types of Nosema in NZ – a new one is emerging. Varroa is a vector for Nosema (cycles between the two conditions). A strong nectar flow will stop Nosema.

Keegan decided to do a varroa 'icing sugar shake' on 3 hives from each apiary (see Randy Oliver 'Scientific Beekeeper' on varroa control). Take your bee sample from the centre of the brood frames – 300 bees in icing sugar shaken 30 times, then 30 more times:

- 1 mite/100 bees is ok
- 3 mites need varroa treatment
- 10 mites are big trouble for the health of the hive

Manuka Health used Bayvarol strips (60 mites/300 bees dropped to 10 mites) and then straight after used Apivar (10 mites dropped to 0 mites). Note that Apivar paralyses the mites which then drop to the floor, so you need ventilated (mesh) bases for this treatment to be successful.

Alcohol shakes are more accurate.

Multiple issues create hive stress e.g. travel between sites, weather conditions, bee health (varroa versus Nosema).

Varroa mites eat the fat out of the bee (not the blood) therefore lowers the bee's weight.

Manuka Health have found some good answers from their use of synthetic varroa treatment. Be sure to follow the instructions. Don't leave them in for more than 6 weeks or you risk building up resistance.

Their varroa treatment regime is:

- Bayvarol (a milder treatment) is used in Spring
- Remove the Bayvarol by November and put in Oxalic strips until mid-April
- Then Apivar for winter protection (using a mesh base)

Their annual colony loss has gone from 13% down to 7% with this regime.

There is speculation that constant oxalic acid use may lead to resistance. Mites in the US have developed gene resistance to Bayvarol.

News from last Club Day (continued)

General Comments

A hive needs 4 - 5 frames of bees to over-winter. You need to have finished feeding sugar by the end of April. The bees cannot process the sugar as easily after that and gut problems may develop. They feed MegaBee pollen patties for bee health.

No guidelines yet for residual oxalic acid for exported honey.

Manuka Health use special imported oxalic staples. They are drier.

Be careful if you make your own oxalic strips/staples by heating oxalic acid with glycerine.

On rapid heating, oxalic acid decomposes to formic acid, carbon monoxide, carbon dioxide, and water. Formic acid further decomposes to carbon monoxide and water. Here are the reactions:

$2(\text{COOH})_2 \rightarrow \text{HCOOH} + 2\text{CO}_2 + \text{CO} + \text{H}_2\text{O}$ then on further heating $\text{HCOOH} \rightarrow \text{CO} + \text{H}_2\text{O}$

Oxalic acid Formic acid

Formic acid

Make sure you have good ventilation to stop any build-up of toxic carbon monoxide gas plus the less reactive but still toxic carbon dioxide gas.

Kowhai and Karaka nectar is poisonous to bees.

Raw sugar is harder for bees to process because they must add water to the sugar. Don't use it. It takes too much energy to process.

Sugar syrup has 66% moisture which the bees have to reduce to 20% moisture (they regurgitate the water which also takes energy), before they are able to eat it.

Manuka Health only use single brood boxes. Less labour involved than double brood boxes and they still get a similar honey yield.

The last hive inspection is the 18th May then the hives are closed down for two months at the end of May.

They spray Delfin (moth killer) insecticide on the outside of their stored clean supers (after freezing the supers at -20C) to keep the wax moths away.

David and Keegan

Dave discussed his oxalic acid strip preparation. Use them as soon as you can after preparation, less than 2 weeks old if you can. Ideally the strips should not be wet.

Might be best to use the oxalic mist treatment after dark when all the bees are back in the hive – field bees could be bringing mites back with them.

Dave's bees are looking good. Same honey flow has started. Swarming has lessened or stopped. Swarming usually stops when the honey flow starts.

Cider vinegar is not effective against new versions of Nosema.

Apilife Var (ALV) contains 4 essential oils, Thymol, Eucalyptus, Camphor and Menthol, absorbed in a vermiculite wafer, with slow vapour release. Its blurb says there is no resistance to ALV in the world for over 30 years.

Manuka Health are about to trial it and see its effect on Nosema levels.

When putting multiple supers on at the same time it is best to separate them with a newspaper sheet (David) or Manuka Health use a thicker paper sheet (with a small hole in the middle for access), which lets the bees use the bigger storage space as required i.e. one super at a time.

Manuka Health take off supers to prevent honey theft and/or a change of floral source

e.g. rewa → manuka → rata.

Benefits of using mesh floors:

- Less hive moisture
- Less varroa mites
- Less swarming (easier to check for cells)
- More honey
- May need more syrup in winter in colder areas
- Include a removable coreflute strip in the mesh floor to help protect against winter cold

Be careful not to damage supercedure cells when working your bees.

Have a look at www.russetgardens.com (Email: dominic@russetgardens.com) for a wide selection of flowering plants.

You will need to show your bee club membership card when buying at Farmlands. We had thought our shareholder discounts applied to all Farmlands products, but this may not be the case. Still to clarify.



The **Big Buzz Festival** will be held on **14 February 2021** in Matakana, north of Auckland. This free, family-friendly festival will celebrate bees, honey and ethical beekeeping. If you are interested in becoming a stall holder you can apply [here](#). More information about the festival can be found [here](#).

[The Problem with Honey Bees](#)

They are important for agriculture, but they're not so good for the environment

To many people, honey bees symbolize prosperity, sustainability and environmentalism. But as a honey bee researcher, I have to tell you that only the first item on that list is defensible. Although they are important for agriculture, honey bees also destabilize natural ecosystems by competing with native bees—some of which are species at risk. Click on title to read more.

[Retired beekeeper warns of disease threat](#)

A retired Timaru beekeeper says people should not be alarmed by bee swarms.

Phil Sutton was called to examine and collect a swarm at Aoraki Little Wonders in Timaru on Friday and said such activity would have been caused by an overcrowded hive nearby.

[Read more HERE](#)

[Update: AFB Honey Testing](#)

Hill Laboratories is able to test for American Foulbrood (AFB) in honey with a 24-hour turnaround time.

As the country's largest independent, privately-owned analytical laboratory, they are one of the few laboratories in New Zealand that is accredited to test for AFB.

Click on title to see more information

[Funding success for research on heavy metals impact on bees](#)

Dr Megan Grainger, from the University of Waikato, has secured funding to study the impact of toxic metals on bees and hive health. Dr Grainger has been awarded a Marsden Fund Fast-Start grant to examine the relationship between metal accumulation in specific areas of bees' brains and changes in genetics, colony function and overall bee health. The research will involve placing bee colonies on land contaminated by metals due to extensive fertiliser use and monitoring the hives and bees over successive years.



APICULTURE
NEW ZEALAND

Financial Statement

Whangarei Bee Club Incorporation

Opening Bank Balances as at 20 October 2020

Operating Account	23,592.16
Savings Account	404.99
Total Funds at 20th September 20	<u>23,997.15</u>

Plus Income From

Membership Fees-New	905.00
Membership Fees	360.00
	<u>1,265.00</u>
	<u>25,262.15</u>

Less Expenditure

Bank Fees	1.60
Web Site - OnLine designs	42.55
Whareora Hall Hire	80.00
Pizza's & Milk, Biscuits, Coffee	245.43
Farmlands - Joining Fee (Shares)	500.00
	<u>869.58</u>
Total Balance at at 20th November 2020	<u><u>24,392.57</u></u>

Made up of

Operating Account	23,987.58
Savings Account	404.99
	<u><u>24,392.57</u></u>

Other News and websites to check out

[Sticky high aimed at \\$ billion export market](#)

[Honey glut stings beekeepers](#)

[No major changes for agriculture with new Cabinet line-up](#)

[Teen entrepreneur does well at awards](#)

[Hot water or chemicals? The controversy over weed killer in Auckland's streets](#)

[War on wasps escalates with plan to introduce new organisms](#)

[Employers are an essential part of Fire and Emergency support crews](#)

[The cutting-edge technology that could take the sting out of summer](#)

[Solitary bees are born with a functional internal clock—unlike honeybees](#)

[Researchers Find Cause of Bee Deaths from Pesticides](#)

[Bay of Plenty avocado orchardist admits stealing queen bees and mating boxes](#)

Call for contributions

All you budding writers out there, we are looking for contributions to the monthly newsletter. It can be a one-off article or an ongoing piece. If you have something to add, then please email it to wbccommunication@gmail.com



Thanks to all contributors of the Newsletter

Wishing all members a very Happy Christmas and a Buzzing New Year



Thanks to our sponsors for their support of the Honey Competition at Whangarei Bee Club:

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