# Whangarei Bee Club INC

## Newsletter

#### September 2017, Issue 153

## Plant-of-the-Month Contributed by John Beauregard

Short articles of interest to Northland beekeepers, especially non-commercial beekeepers Along with hangehange (reviewed in the



#### www.teara.govt.nz

*Pittosporum* is a genus of New Zealand native trees and shrubs of great value to honey bees in the early spring. Karo (*P. crassifolium*) and kohuhu (*P. tenuifolium*) are minor contributors of nectar and pollen whilst tarata (*P. eugenioides,*) also known as lemonwood, is a highly-prized springtime source.





## Upcoming Events

This Club Day 2 September Same place, same time

Check out page 4

Next Club Day 7 October See you there October 2016 newsletter) and mahoe (to be reviewed next month), lemonwood is a principal constituent of early-season "bush honey" harvested in Northland. Walsh is enthusiastic in his praise of this very common native tree which yields copious amounts of yellow pollen and a light amber nectar that extracts easily and granulates finely.

http://www.terrain.net.nz/friends-of-te-henui-group/treesnative-botanical-names-m-to-q/lemonwood.html

http://www.terrain.net.nz/friends-of-te-henui-group/treesnative-botanical-names-m-to-q/koro.html

http://www.terrain.net.nz/friends-of-te-henui-group/treesnative-botanical-names-m-to-q/kohuhu.html

"Nectar and Pollen Sources of New Zealand," RS Walsh, published by ApiNZ, is a principal source of information. The club's library holds a copy of this very useful title. The web references provide excellent photographs, some of which are from proprietary sources such as plant shops.

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## Notices

1) For novice beekeepers who need AFB checks, please contact Paul Martin who will arrange for someone in your area to check your hive

2) Please register your hives with AsureQuality at the following link: <u>https://www.asurequality.com/our-industries/apiculture/apiary-register/</u>

3) A roster for helping out on club day will be kept at the front of the hall so if you are able to help please put your name down

4) This Club Day: Hukerenui School will be providing a short presentation this Club Day, so come along to find out about their exciting new project

5) 30 Hives For Sale: Contact Daniel 021438373 or Denise 021234543

6) Top Bar Hive For Sale \$380: Contact Tilasmi 0221377477 who can bring hive to Club Day (photos on next page)

# Notices (continued from page 1)

**Top Bar Hive For Sale:** Made from eucalyptus timber; has been used, but in very good condition - Contact Tilasmi 0221377477





# **Financial Statement**

Whangarei Bee Club Incorporation		
Bank balances as at 20 July 2017		
Operating account		10,606.42
Savings account		18,103.34
Total funds at 20 July 2017		28,709.76
Plus income from		
Membership fees	728.00	
Interest received	23.07	
		751.07
		29,460.83
Less expenditure		
Bank fees	2.00	
Hall hire	65.00	
Licences	47.44	
Club provisions	-	
Website	23.00	
RWT on interest	7.61	
		145.05
Total balance at 20 August 2017		29,315.78
Made up of		
Operating account	11,196.98	
Savings account	18,118.80	
		29,315.78

# New Zealand Certificate in Apiculture (Level 3)

Structure	18 workshops and online learning modules	Duration	Part time over 12 months
Delivery	Part time	Cost (approx.)	Fees free for 2017
Start date	Early October 2017	MOE Code	NZ2223
Location	Whangarei and Mid North		

#### **Overview**

The lucrative and rapidly expanding apiculture industry wants more Kiwis to become beekeepers. Demand for pollination services also continues to increase with NZ's primary industry dependent on the pollination of fruit and crops for its survival.

If you have ever wanted to have your own beehive or want to work in the apiculture industry then this programme is for you.

#### Content

Graduates of the qualification will be able to:

- maintain, manipulate and operate beehives to produce quality products and pollination
  services
- assist to transport beehives and bee products, and establish hives in new sites
- carry out a beehive disease management plan.

#### Admission information

- All applicants must:
- be at least 16 years old at the time the programme commences
- be able to read, write and communicate in English at a basic level
- be physically able to complete the programme-specific outcomes.

#### Qualification gained

New Zealand Certificate in Apiculture (Level 3)

#### Enquiries:

Email enquiries to: bees@northtec.ac.nz





Freephone **0800 162 100** For more detailed information visit: **www.northtec.ac.nz** 

Refer to our website for terms and conditions



# News from last Club Day

## Summary Whangarei Bee Club Meeting 5 August 2017

Guest Speaker – Dr James Sainsbury from Plant & Food Research, who gave a presentation titled 'NZ Honey Bee Health'. He covered the following three topics:

## 1) Varroa control in NZ

Focussed on the use of oxalic acid (3.2% in sugar solution). Used a syringe to dribble 5ml of this solution on the top of each frame in the brood box. It lasts for 4 days and dissipates completely so no residue left. Approximately 80% of varroa are in the brood at any one time, so if there is no brood then treatment is very effective – aiming at a 95% hit on varroa numbers to be an effective treatment. With brood they got a 40% varroa die back. Without brood this increased to 90% die back. To achieve a 'broodless' period you can either cage the queen or re-queen using either 2 or 9 day old queen cells.

Why use oxalic acid – cheap; leaves no residue; as an alternative to the use of synthetic chemical strips (Apistan etc), whose use / overuse could lead to varroa becoming resistant to them. How organic acids (oxalic and formic) affect varroa (the mechanism) is not yet understood.

The oxalic acid dose lasts for 4 days and could be repeated, however the toxicity buffer between varroa mites and bees is only 5 times i.e. 5 x the dose that controls varroa will kill bees, so avoid too many treatments, one after the other.

## 2) New Pathogen Identification

History of the problem: unexplained colony losses in Spring 2014. The main symptom was 95% worker bee loss and no dead bees out the front of the hive. Same happened in 2015. The Spring of 2016 the same again. Possible causes that were discounted: starvation, varroa, weather conditions, karaka poisoning, pollen shortage. It is thought that pathogens are the likely cause. Suspects: nosema ceranae (causes "Rapid Colony Depopulation' and is comparatively recent – last 20 years); nosema apis (causes Spring Dwindling Disease and has always been around); Lotmaria passim; KBV.

Nosema is thought to be the cause of the Spring dieback. It is transmitted through bee faeces. Spores contaminate the comb and are therefore transmitted from generation to -generation. Treatment is to heat the hive at 50°C for 2 hours. This results in a two times increase in brood viability compared with the untreated hive. Formic acid is the next treatment to be trialled but it is likely to be harder on the bees themselves. Determining the dose rate will be important.

## 3) AFB (American Foulbrood)

A bacterial disease. Thought to be spread mainly by beekeepers actions e.g. swapping equipment between hives. Robbing from infected hives is the other main transmission vector. Noted that the current AFB control regime, since 1990 when beekeepers were told to monitor their own hives, has been very successful. Since the year 2000 infected levels have remained static at 0.2% of registered hives.

Currently Plant & Food Research are developing a DNA diagnostic test for AFB. It is called QPCR. It is cheaper, more sensitive and has predictive powers. It is planned to use this test to compliment the current control regime.

## Knick Knack Section

Deferred until next meeting.

### David and David Hive Time

Keep the feed up to your hives. Brood numbers will begin to increase as the days get longer with Spring approaching. Starvation can occur quickly with increased brood and variable weather.

It was suggested from the recent ApiNZ conference that cider vinegar for nosema control may not be effective. Wasps are still around and causing problems although it is late in the season for this.

Drones are already around. Might want to consider requeening from the start of September, if required. Wait until the warmer weather before bringing the queen down to the bottom box.

Ideally change 50% of your brood frames each year. It is a good practice.

Honey from brood frames shouldn't be extracted due to residues from synthetic strips (for varroa control). Mite-away (formic acid) can have a bad effect on brood in autumn, as the hive is shutting down. Might be best to use it in Spring for that reason.

September is <u>Bee Aware Month</u>. The plan is to bring the story of bees to a wider audience e.g. schools, clubs, councils (plant 'bee friendly' species). The committee will look into what WBC can do to promote this.

### Next Club Day

- Discussion on hive 'crowding'
- Summary of the ApiNZ conference
- Hukerenui School project proposal



## Call for contributions

If you would like to make a contributon to this newsletter, we invite you to email your submission to wbccommunication@gmail.com

# Club Day

## Whareora Hall 10.15am

#### <u>Bring:</u>

- Cash for the produce table
- Produce for the produce table
- Your loyalty card to show at the door
- Bee suits

#### **Directions**

From SH1, turn off to *Kensington*. Turn left into *Mill Road*, then right at *Whareora Rd*. Keep on *Whareora Rd* until it joins *Pataua North Rd* and carry on for a few more minutes. The hall is on the right. Park on hall side of road.

## Fox News Contributed by Mike Fox

Swarming is the instinctive reproduction of the Bees. Individual worker bees have given up their ability to reproduce as the species evolved from solitary bees to become social bees. As part of a super organism (The colony), workers help their mother (The Queen), to rear the young, and so reproduce in that form- a super organism.

Interestingly, an individual bee is cold blooded, while the colony combined is a warm-blooded entity.

The instinct to swarm is in all colony species, Ants, Termites and the Bees. It is as strong as any other species of animal, us included. Reproduction is the purpose of life (Not social media).

There are a few triggers that need to be tripped before swarming plans get under way. They include.

- A population of workers exceeding about 8000 bees, that's about a full depth box 3/4 full.

- A higher population of nurse bees in relation to forager bees. This usually occurs after a big flush of brood being reared when the first decent pollen source comes on stream in early spring.

- A lack of comb space for the Queen to lay in. Empty comb space is critical to swarm prevention. Foundation does NOT count as comb space.

- Drones must be available before a colony will make the move, as the new Queen(s) will need mates. Although inbreeding is not ideal. Usually, if one colony is making drones others are also doing it, so a wider pool of drones will be out there. (cont. p. 5)

# News/sites to check out

A new website, and its corresponding Facebook page 'Hive Hub', with a love for bees:

www.hive-hub.com

Farming cuts native bees 90%:

http://www.radionz.co.nz/news/country/336816/hig h-intensity-farming-cuts-native-bees-by-90-percent

#### Rural news:

http://www2.nzherald.co.nz/thecountry/news/article.cfm?c\_id=16&objectid=11904 492

#### Bee hives not wanted:

https://www.stuff.co.nz/environment/95356033/bee s-created-a-happier-garden-in-one-aucklandhome-but-will-they-have-to-go

#### Bee-poisonings evoke community action:

https://www.stuff.co.nz/environment/95361578/bee -poisonings-evoke-community-action

#### New aphid species problems:

http://www.nzherald.co.nz/wanganuichronicle/news/article.cfm?c\_id=1503426&objectid =11894518 Swarming will occur at the beginning of the season before the main flow. Most areas have an on again off again patchy flow before the main flow starts. This is when the swarms usually happen. Once the main flow starts they just get their mind set on honey production for winter stores. That's what it's all about, winter preparations. It's not meant for us.

Rather than catching your swarm from up in a tree, or losing them to somebody else, it may be better to help them do what they want to do, but at your convenience. Split them just before they swarm. Regular inspections will be necessary to determine the moment. You want to see swarm cells that have either eggs or larvae in, but haven't got to the stage of being capped yet.

Typically, if you find capped swarm cells, the swarm has already issued. If there are capped cells, lots of bees still in the hive and you are not sure if it's happened or about to. Have a look through the brood frames looking for a patch of actively emerging brood. This is the Queens most favourite place to lay. If there are eggs here, then the queen is most likely still here. Find her, take her, about half of the brood, the capped half, and 2 honey frames, and put them in another box. These frames of brood should have NO swarm cells on. Put this box with the queen in nearby, facing the opposite direction as the parent hive. This will reduce the population a little, the older bees that fly from this 'new' box will fly back to the parent hive which will help to bring the age imbalance back closer to ideal. In the parent hive you should leave a couple of swarm cells and remove all others. Fill the space where the brood came from with spare combs. Foundation is pointless at this point.

If the parent hive fails to get a new queen mated and laying, you can reunite the little nuc you made with the queen and brood. If the parent hive does end up with a new decent queen, you can kill the old queen in the nuc and reunite with the parent to create a monster hive that will gather more honey, than the 2 would have if they were individual hives.

Another swarm control measure is to check the colony every 7-10 days and remove all swarm cells on every frame. Don't be a cheat and only check the main brood frames as sometimes there will be cells right out on the edge in the honey frames. If you miss 1 cell, you have wasted your time, so shake all the bees off the frames so you can see the cells.

The best prevention method is to ensure the queen has plenty of comb space to lay in. If you have a 2 box hive, the bees will be up in the 2nd box by spring time. Swap the boxes around top to bottom, this will put the more empty box on top and the queen will happily move up into it. Put a super on early, use any drawn combs you have before using foundation. I would certainly keep an eye on the hive as there is NO method that is 100%. Do the 10 day checks.

And remember, this is reproduction. If the colony tries to swarm, it means it is in peak condition, WELL DONE.

Happy beekeeping. See you at club day

Thank you for your contribution, Mike

