

March 2021 Newsletter

Next meeting | Wednesday 3rd March 2021 Where | Main Hall, Johnsonville Community Centre, Moorefield Rd Editor | Eva Durrant <u>edurrant@xtra.co.nz</u>

Topics for March meeting

Beginners session

Final honey harvest and preparing for winter.

Main Meeting

Speaker: Dr Phil Lester. A Professor in Ecology and Entomology at Victoria University in Wellington, Phil has published more than 125 articles on invasive ants, wasps and other insects. Author of Healthy Bee, Sick Bee.

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Note from the President – James Withington

By now most of you have probably removed your summer bounty from your hives and enjoying the taste of fresh honey on your toast or in your smoothies for breakfast. Don't forget to have your honey tested for tutin through the club before you start selling, bartering or swapping it with your friends.

Club member, Dr Phil Lester, will be our guest speaker this month. Phil's talk is titled "Honey bees, pesticides, parasites and pathogens". It will be an overview of key themes of his recent book, Healthy Bee Sick Bee, specifically around an analysis of what is killing or harming bees in NZ. Phil Lester's book reviews a lot of the current literature and research from around the world on bee health. It will touch on AFB, Varroa, pesticides including neonics, and some predators and parasites that are peeking over the horizon. *There are two copies of the book in the WBA library*.



For those of you who would like a hands-on day on wintering down your hives, don't forget that the Southern North Island Beekeeping Group Inc are hosting a workshops day on Sunday 14 March at the Manakau Hall, State Highway 1, Manakau. Registration starts at 9am and the day commences at 10am. Nonmembers attendance is \$35 and members are \$25. Remember membership is a cost of \$10 per year so if you join up you will receive all the benefits such as newsletters, attendance at meetings and discounted field days. On the day there are raffles with great prizes and lunch can be provided for \$10 so bring along a pocket full of coins.



A reminder to those of you who have borrowed books for the library to return them please. This is a club resource for everyone to use and have access to. There is a cost to the club, and we don't want to have to keep replacing book because people forget to return them. We have a small budget to purchase new books, so keep an eye out for the new additions.

For those of you wishing to complete the AFB recognition course, the dates for the Wellington region are limited. The next courses are Masterton, Saturday 10 April and Lower Hutt 22 May. All details on registration and requirements can be found on the AFB management website. <u>https://afb.org.nz/beekeeping-courses/</u>

I am thinking of bringing a bit of creativity to the club and wish to float the idea of holding a decorated bee box competition. I know there are many talented and creative people within the club who love designing and painting boxes. I will table this idea at the next meeting to gauge the interest.

Looking forward to seeing everyone on the 3rd at club night.

James

Nosema, the forgotten honeybee disease. Frank Lindsay

There are a lot of new beekeepers out who that don't know about nosema and its effect on honeybees. It is spread through faeces in water and from house bees cleaning the hive and then feeding larva.

Nosema is a serious disease caused by a tiny microsporidian (fungi) that eats out the bee's gut wall lining (epithelium) causing, in extreme cases, the adult bee to starve. Most bees have some level of Nosema in their gut. It causes spring dwindling and queen supersedure shortly after introduction. It shortens the house bee forager's life by up to a week and it has been said that a healthy hive



will produce a super of honey more than a hive with a serious Nosema infection. Nosema is not apparent just looking at a bee but it is possible to check the gut of several bees visually by taking off the bee's head and removing the gut by carefully drawing out the stinger. Along with it will come the entire crop and gut etc. If the epithelium is swollen and clear, it is a sign of Nosema. A normal epithelium will show the wrinkles and will be the colour orange from the pollen inside.

In Australia I was told the bee faeces can give you a guide to nosema levels especially in spring. A long thin orange faeces indicates a healthy bee. A round splat with little colour indicates this came from a bee with nosema. So check your car before cleaning off the bee poo.

Most laboratories offer this test but with a 400 or 1000 power microscope, you can do it yourself. Randy Oliver (www.scientificbeekeeping.com. Nosema twins - part 3 sampling) has developed an easy way to estimate the spore level in your bees using the eye piece only of the microscope. The more scientific way is to use a hemocytometer.

Attached is very old paper but is still relevant today on how to test for Nosema. To get a really good indication, the beekeeper needs to test bees collected off the landing board more than twice a year, especially if Nosema ceranae is involved; (all North Island areas above Wellington now have Nosema ceranae). Nosema ceranae spores build during the summer while Nosema apis is mainly associated with spring and autumn dwindling when there is poor nutrition.

Nosema apis has been in New Zealand since the first bees were imported. Nosema ceranae perhaps came in with some pollen and was discovered at the same time as the kiwifruit bacteria Psa. Generally, N. Ceranae replaces N. Apis but we still have it in sections of the North Island and all the way through the South Island according to the results of test from MPI's Pathogen Programme.



Nosema ceranae doesn't seem to like the cold, so at the moment cuts off at Cook Strait. It will be interesting to observe if N. ceranae moves south with North Island hive movements and as things warm up.

I used to have Nosema badly in my hives in the Wellington District during the 1980s because our changeable weather puts stress on our bees.

I found by breeding from hives that showed little nosema, I was able after a few years to change the type of bee I had. It's only in the last three years that I have seen a return of Nosema symptoms to a few hives: a pile of young looking bees dead out from a hive. It can be treated with an antibiotic but this is not allowed in NZ or Europe.

Beekeepers can do a few things with good hygiene to help the bees:

Change out a number of old black brood frames each year and replace them with foundation. Make sure the hive always has nectar and pollen around the brood nest. Feed if you need to. Some beekeepers are getting good results by feeding api-herb in the sugar syrup. In America, beekeepers are taught not to squash bees when reassembling the hive after an inspection. Use the scraper end of the Kelly Type (paint scraper) hive tool to hold up the front of the super when placing the super back on the lower super. Puff a little smoke around the sides and front to move the bees back, then remove the hive tool and gently lowering the super.

For further reading there are lots on the internet.

Download Nosema Disease part 2 by Michael Hornitzky from the Australian RIRDC site. <u>08-006.pdf (agrifutures.com.au)</u>

Closer to home, Prof Phil Lester (Victoria University) has just produced a new book (Oct 2020) on bees' health. "Healthy Bee, Sick Bee - the influence of parasites, pathogens predators and pesticides on honey bees." (The most up to date book on bee health and will change the way you look at some diseases like AFB).



In my apiary – Jill Dalton



We brought our property in 2010 – all around the house was kanuka and other natives. Jim said – this would be a good spot for some bees! I didn't think a lot more of it until late 2005 when he announced he had ordered two nucs. Gulp. It was like having newborns in the family and not knowing a heck of a lot about beekeeping.

We quickly brought a copy of NZ Beekeeping, joined the Bee Club, and drew on the wisdom of our friends at Kiwimana – Margaret and Gary.

What a roller coaster ride beekeeping is. The longer you have bees, the less you seem to know. Things that happen one year have you vowing to do better the following season, then a new set of problems occur, and on it goes.



I've developed a healthy dislike of varroa and wax moth. The sight of them both brings instant annoyance and scheming for further control. (That in itself brings a variety of methods and problem solving)! Losing a colony brings feelings of failure and a determination to prevent this in the future (although it's hard to accept that the queen might have failed for whatever reason).



Then sometimes I feel guilty about taking their honey, or not preserving a frame with lovely pollen, painstakingly collected. The complexity of their roles, and their commitment to the colony is a delight. Hard working, diligent are thoughts that often spring to mind.

Increasingly we are reminded of the importance of these pollinators, and who really cares about a few specks of bee poo on the windows – well a lot of specks at this time of year. The preservation of bees is a high priority for us these days, and we take the opportunity to educate others wherever possible.



We go out of our way to plant bee friendly trees and shrubs, and encourage our friends to do the same. It's a joy to watch bees enjoy local flowers – I've discovered you can use up a fair bit of time this way.

So it was with that in mind that I joined the Committee, although feeling a bit of a novice with so much wisdom around. However, it takes all sorts to contribute and bring fresh points of view and ideas – so maybe we need to keep that momentum going. It's been a great journey meeting fellow beekeepers, chewing over problems, getting confused with many solutions to the same problem and attending club meetings and field days. So much to learn!

The hum of bees is the voice of the garden.



- Elízabeth Lawrence



Not here, Bees!

PK Tan has met another challenge. Bees setting up home in a convenient hole in a large cabbage tree.

Has any beekeeper had success in removing bees from a similar spot? PK is interested in some sage advice and is happy to discuss innovative approaches.







March Checklist

- Test for varroa mite levels and treat if necessary
- Extract honey
- Requeen hives
- Check for wasp damage
- Sell or store honey crop
- Store honey supers or return to hives

Taken from Practical Beekeeping in New Zealand by Andrew Matheson & Murray Reid





Chartwell Apiary Field Day

Several new beekeepers attended the field day on February 6th with Frank, Martin and myself.

We examined all hives to ensure they were queenright – one hive had died and several needed requeening due to patchy brood pattern.

We will use our autumn queens for requeening and maybe see if we can get some more from Gary Jeffery as our previous shipment from him clearly show some degree of VSH (varroa resistance).

Formic acid strips were added to all hives but we will check again for signs of varroa at next field day.

Main nectar flow is over with just a dribble coming in now – mostly koromiko and some gums.

Rearranged honey frames and took an empty super off most hives and returned these to storage as we were proven to be over-ambitious about the honey flow! Better to err on the generous side – bees can't fill honey supers left in storage.

Apiary will probably average a surplus of 1 - 2 boxes per hive. We will keep the honey for use with over wintered nucs.

John Burnet



Wingate Apiary

In January we did a major tidy up as the grass around the hives had grown a lot over the Christmas break. We also had a look through the hives to see how they were doing.

They were doing well, so in February we took off around 30 kgs of honey which we plan to donate as a treat to struggling local families. The honey is a nice dark bush honey which I'm sure they will enjoy.

We extracted the honey in a local church hall kitchen which was ideal for this purpose. And the honey has been put into donated recycled glass jars.

Our next visit will be at 10 am on Saturday 13 March. All are welcome. Have spare suits but BYOG (gloves)!

Suggestion is that we have an Open Day at the apiary soon, so watch this space!!





Richard Braczek



Wellington Beekeepers Association













Around the hives

Richard Braczek

Last weekend I extracted some honey from my hives, so in the evening I was putting the wets back on as recommended to reduce the chance of robbing. Just finished doing this and was walking away when I noticed an explosion of bees trying to get into one hive. It was full on, so I blocked off the entrance to save it. Then when the bees had stopped flying, I attached a robbing screen. First thing the next morning the bad neighbours were back but the robbing screen did its job and the hive has survived. I haven't opened it up yet to see what may have caused it to be singled out. It's not my strongest hive but certainly wouldn't consider it a weak hive. Haven't noticed any attacks on any other hives.

Robbing is common when the honey flow stops. Lots of bees with not a lot to do except to try and nab something from the neighbours if they can. So, it's a good idea to reduce hive entrances now particularly those of weaker hives. If you notice extra activity around a hive entrance reduce the entrance down to just a bee width or put a robbing screen on. The screen is also good for preventing wasp attacks as their numbers build up at this time of the year.

https://www.youtube.com/watch?v=8jiZPzPBEmo

When the wets (the frames after extraction) have been cleaned up by the bees over the coming weeks up you can start taking them off and storing them. Stored frames will be susceptible to wax moth and ant infestation so store them with this in mind. Put your frames in a freezer for a few days to kill wax moth eggs and then then store them in plastic bags.

Varroa treatment

Now is the time to treat your hives for varroa. Varroa numbers will have shot up during the honey flow and the percentage will continue to climb as bee numbers



start declining as Winter approaches. You want to blast varroa now so that your hives will be healthy and strong over Autumn and in a good condition to survive Winter.

Creaming honey

If you put your honey straight into jars after extraction, it will crystalise into solid blocks. You can cream it with the addition of 5-10 percent of creamed honey. Stir daily until your honey starts to thicken and then jar it. It will take on the properties of the introduced honey and be easy to spread on your toast.

Storing honey

The best way to ensure your honey will store well is to only extract from frames which have been capped by the bees. Before capping, bees will have removed most of the water from the nectar. Uncapped honey will have a greater percentage of water and is therefore likely to ferment when stored.

Selling honey

If you want to sell your honey you need to meet a number of requirements which are summarised in this article. <u>https://thisnzlife.co.nz/honey-making-rules-and-regulations-5-important-things-to-know-if-you-want-to-sell-honey-in-new-zealand/</u>

In particular, if you have extracted your honey after 1 January you will need to have it tested for tutin. Bring along a sample of your honey to a meeting and John will include it as a composite sample along with other members' samples and send it off for a test.



Beekeeping in the Chatham Islands Jane Harding

In December 2020, in lieu of any overseas travel, we took a trip to the Chatham Islands. The Chathams is a place I've always wanted to visit and latterly, I've particularly wanted to visit beekeepers on the Chathams. Chatham Island beekeepers are fortunate to not have AFB or varroa in their hives so I was keen to see what that might look like.



Beehive at Admiral Gardens

Despite its location in the middle of an extremely windy ocean (and the weather forecast suggesting it rains all the time) the Chathams have a very benign climate and actually quite a lot of sunshine. The soil is extremely fertile in places, a combination of volcanic soils, peat bogs and thousands of years of seabird guano. Provided you can provide shelter from the consistent wind, you can grow pretty well anything. Whilst the original inhabitants (Moriori) did not need to cultivate plants for food, having an abundant food source in the forests and seas, the Europeans who arrived

established gardens, orchards and agriculture. So productive were the gardens that in the 19th century the Chathams was known as "the garden of the South Pacific" and tonnes of potatoes were exported to the goldfields of California, Australia and Otago.

One of our visits was to the Admiral Gardens, just out of Waitangi township. Admiral Gardens are an example of one of these stunningly productive gardens that used to exist around the old homesteads in the Chathams. Lois and Val Croon have lived at Admiral Gardens for many years and Lois has been beekeeping for over 30 years. Lois was generous enough to let me look at her



hives when she did an inspection. The first thing I noticed was how yellow the wax and honey were. Dandelion is a mainstay for Lois's bees and that gives everything a golden hue. Dandelion and clover are the main nectar sources on the Chathams, and as the native vegetation there is not particularly rich in nectar, bees rely mostly on pasture and garden plants. There are none of the big forest trees that our bees would utilise, such as Rewarewa, kamahi, Hinau or Pohutukawa, though we did see bees in the late-flowering Chatham Island forget-me-nots.

Wet winters can be a problem for the bees, so most beekeepers leave a lot of honey on the hives or feed them over winter. Hive location is critical, so the bees do not get chilled in the constant wind.

There are a dozen or so beekeepers on the Chatham Islands and they need to be self-sufficient. As honey and bees cannot be imported to the Islands from New Zealand, the beekeepers breed their own replacement queens and share those with other beekeepers on the Islands. Seeing disease-free hives was really interesting and I was impressed with how resourceful and adaptable the beekeepers are as a result of having to do things for themselves.



Chatham Island Honey House



Dwarf avocados at Admiral Gardens



Wellington Beekeepers Association



From the CE, Karin Kos

Last week's release of the <u>Ministry for Primary Industries Apiculture Monitoring</u> <u>Report for the 2019/20 season</u> succinctly highlighted our industry's challenges and opportunities, with ongoing media interest in how our industry is tracking.

One of the less profiled pieces within the report was the continuing rise in beekeeper numbers, particularly hobbyists. While there was a decline in hive numbers – a fall of 5% and the first drop in numbers for 15 years, this was not mirrored by beekeeper numbers which reached 9,585 (up 303 on the previous season). As any knowledgeable beekeeper will tell those new to beekeeping, it's a great hobby or business but it's hard work and requires a willingness to learn. A great way to do that is to join a local beekeeping club and learn how to be a good beekeeper from others in the community. Here's a link to <u>ApiNZ's beekeeping</u> clubs and the <u>New to Beekeeping</u> webpage.

EPA announced this week that it has approved the import and release of two new organisms to be used in the fight against wasps. The two insects; the wasp-nest beetle, *Metoecus paradoxus*, and a hoverfly, *Volucella inanis* have been approved for the biological control of German and common wasps.

ApiNZ's Science and Research Focus Group put in a submission supporting the application and chair Barry Foster says the approval is good news for the industry. "In 2019, wasps were responsible for 9.6% of overwintering colony losses. We estimate that cost our industry \$4 million. Effective biocontrols cannot come soon enough."



Interesting websites

From the ApiNZ site

Insects to tackle wasp problem Environmental weapons approved to deal with wasps RNZ interview with Phil Lester: world of honey bees

From an Australian friend (Thanks to Patrick Conaghan)



https://theconversation.com/phantom-of-the-forest-how-irediscovered-the-rare-cloaked-bee-in-australia-hidden-for-acentury-156026





Who can I speak to?

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Meeting location

Johnsonville Community Centre, Moorefield Rd, Johnsonville

