

December 2024 Newsletter

Next meeting | Wednesday 4 December 2024 Where | Johnsonville Community Centre Editor | Jane Harding janeh@xtra.co.nz

No beginners session, main meeting starts with food and socialising from 6pm.

Christmas socialising, mead competition and a beethemed quiz.

There will be a food truck (Roti Bay) and selection of sweets and treats on offer. Food available from around 6pm.

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#### **From the President**

December 2024

Well here we are either in or looking forward to the honey flow. The cabbage trees have finished in our area and Pohutukawa are just getting going. I hope you all have lots of honey supers, it is at this time that the value of having fully drawn frames becomes very apparent.

I am retiring tomorrow (from my job of 43 years) so at the next meeting I will not have to rush away so I can get a decent sleep because I have to get up at sparrow fart, I will be all zen and relaxed (that's my plan).

I wasn't terribly relaxed when the AFB inspector rang a few weeks ago and announced he was going to inspect my bees on Monday. I agreed he could inspect my bees but said I would prefer to be present when this was done and that I worked full time so Monday might not be convenient. After a little bit of to and fro'ing we agreed that 4pm would be a good time. I was able to get home in time to lock the dog away, unlock the gate, remind my husband and supervise proceedings. I was doing a little dance when I thought he was going very quickly and potentially endangering my bees but the inspector informed me his boss gave him 6 minutes per hive. If that was the case I could see why he wasn't mucking around and in the end it was relatively painless for most concerned and my beehives got the all clear certificate

I noticed I had received the "AFB within 2 kms notice" when I checked my emails later that day. It is a legal requirement to register your hives and as was pointed out to me, I should co-operate with the inspector as a member of the beekeeping community. I agree, we have a common goal to eradicate AFB. To that end the club has been having discussions with Phil Lester and one of his students to assist in any way we can to try and



see if AFB can be eradicated in an identified area within Wellington. We are waiting on a proposal to see how this might be done, it would be a significant achievement if we could help achieve this goal.

I checked my bees just after the inspector did as we were having a spell of fine weather and I wasn't particularly happy about the number of drones in one of my hives. I managed to find a queen but it looked to me like she was only laying drones. I marked her so she would be easier to spot next time and gave her a another week. Sadly when I later checked the situation didn't look any better so she is now taking a bath in isopropyl alcohol (I cannot squash them). I have merged the hive with another hive which was a swarm from a couple of months ago – possibly the queen that was originally in that hive so it will be like a homecoming for her.

I'm looking forward to the meeting next week which will be a good chance to socialise with other members. John has organised a food truck and some sweets so you don't have to slave over a hot stove, just bring some cash (details later in the newsletter). We will have a quiz so I hope you have been studying your beekeeping journals and keeping notes at the meetings throughout the year.

Janine



Bees in Yellow Pohutukawa

# What's Happening Sciencewise?

## Economic injury levels of varroa & the role of pesticides in butterfly declines. By Phil Lester

I've just returned from a trip to Arizona to attend the annual American Entomological Society meeting. This month, I thought I'd share a couple of the talks that might be particularly interesting to people here in New Zealand.



Varroa mites on a bee larva

The first talk I'll discuss was titled "Revision of *Varroa destructor* economic injury levels and pathogens linked to honey bee colony mortality", presented by Nuria Morfin from British Columbia, Canada. The objective of their study was to revise Varroa economic injury levels and examine pathogens associated with honey bee health parameters across five regions of British Columbia (Morfin et al., 2024).

As expected, the presence of Varroa mites in autumn had a substantial impact on the likelihood of colony death the following spring. Colonies with a mite infestation of 1% or more in autumn experienced significantly higher



mortality rates compared to colonies with mite levels below 1%. Based on these findings, the researchers suggested revising the commonly accepted economic injury threshold from 3% down to just 1%—at least for their study region in Canada.

In New Zealand, we have just one strain of the Deformed Wing Virus (DWV), specifically DWV-A. In Canada, however, the levels of another strain, DWV-B, were found to be eight times higher than those of DWV-A in all regions studied. This viral strain is often considered to be much more harmful to honey bees.

The researchers also detected *Malpighamoeba mellificae*, a single-celled parasite that affects the excretory organs of adult bees, as well as *Nosema (Vairimorpha) apis* and other viruses such as Apis Filamentous Virus and Lake Sinai Virus. Their key conclusion was that continuous monitoring of pathogens and regular reassessment of economic injury thresholds for Varroa are crucial, given the ever-evolving nature of host-pathogen interactions.

You can access Nuria's article in the journal Frontiers in Bee Science at <u>https://doi.org/10.3389/frbee.2024.1355401</u>.



Monarch Butterfly

For something entirely different, another talk I found interesting focused on butterflies in the American Midwest. It was titled "Insecticides, more than herbicides, land use, and climate, are associated with declines in butterfly species richness and abundance in the American Midwest" and was based



on a publication from Leslie Ries' lab at Georgetown University, Washington (Van Deynze et al., 2024).

There is mounting evidence that overall insect abundances are declining globally. While habitat loss, climate change, and pesticide use have all been implicated, their relative effects had not previously been evaluated in a comprehensive, large-scale study. The authors examined 17 years of data, including land use, climate, multiple pesticide classes, and butterfly surveys across 81 counties in five states in the US Midwest.

They found that community-wide declines in total butterfly abundance and species richness were strongly associated with pesticide use. For butterfly species richness in particular, the use of neonicotinoid-treated seeds was identified as a key factor. This decline included the abundance of the migratory monarch butterfly.

After the conference, I drove through parts of South Dakota and Minnesota to attend another meeting. The landscapes and agricultural practices there are very different from what we see in New Zealand. However, with evidence of insect declines in New Zealand as well, you can't help but wonder about the role pesticides play here.

You can access their article at <u>https://doi.org/10.1371/journal.pone.0304319</u>.

#### References

Morfin, N., Foster, L. J., Guzman-Novoa, E., Van Westendorp, P., Currie, R. W., & Higo, H. (2024). Varroa destructor economic injury levels and pathogens associated with colony losses in Western Canada. Frontiers in Bee Science, *2*, 1355401. https://doi.org/10.3389/frbee.2024.1355401

Van Deynze, B., Swinton, S. M., Hennessy, D. A., Haddad, N. M., & Ries, L. (2024). Insecticides, more than herbicides, land use, and climate, are associated with declines in butterfly species richness and abundance in the American Midwest. PLoS One, 19(6), e0304319. <u>https://doi.org/10.1371/journal.pone.0304319</u>

## Wellington's Botanic Garden Apiscope

Several years ago, Club member Anne Noble arranged for the importation of several apiscopes from France, one of which was eventually installed in Wgton's Botanic Garden Discovery Pavilion. An apiscope is essentially a very large observation hive which allows close-up viewing of a colony of bees on their natural comb. While the Botanic Garden apiscope is housed in a purpose-built classroom environment, bees have access to the outside via a pipe and hole cut in the adjacent window.

Occasionally the apiscope needs thorough cleaning and comb replacement and this means installation of a new colony of bees – not an easy matter as the bees have to be persuaded to enter the apiscope via the 100mm entrance/exit hole.

Earlier this month club member Marion Saunders (Botanic Garden's Lead Educator) replaced all the comb with new wax sheets and Martin Toland and I undertook to find and install a swarm in the hive. This proved to be difficult – the bees didn't want to travel along the connecting pipe from the swarm box and through the entrance hole despite PK Tan's fancy adapter on the front!

After a day with little bee migration (about a hundred bees), we wheeled the apiscope outside and dumped the swarm on a board at the entrance of the apiscope. Tash Evans (new Lead Educator), Martin and I hastily searched through huge mound of sugar-syrup sprayed bees until we found the queen and poked her through the apiscope entrance hole. Unlike hiving normal swarms, the bees still seemed reluctant to follow the queen into the hive. The problem appeared to be congestion just inside the entrance due to the apiscope design – maybe the French have a different method of populating their apiscopes!



Anyway, three hours later all the bees were in the apiscope, it was wheeled back inside and re-connected to the outside pipe and several bees started emerging from the apiscope and commenced orientation flights.

Tash reports that the bees are now taking up the sugar syrup from the feeder on the top of the apiscope and are drawing comb on the wax foundation. Hopefully the queen will start laying within a few days.

Needless to say, the apiscope is a major attraction in the Discovery Pavilion and used by the Botanic Garden teaching staff to educate visiting school classes about the wonders of bees.

Following is the photo story of repopulating the apiscope



The swarm placed in front of the Apiscope entrance





Encouraging the bees into the Apiscope





Bees entering the Apiscope tube





Bees moving down the frames

Thanks to John Burnet and Martin Toland for the story and pictures



#### **Brooklyn Swarm**

We've all got a story about a swarm in the wrong place, too high, too hard, too tricky to collect. And probably also a story about a swarm in a weird place. Here's one to make you smile, and one good use for all those road cones.... Thanks to Martin Toland for the pictures!



Nothing to see here





Look under the hat!!



Nearly home and sorted ...

## Porirua City Council Animal Bylaw Changes proposal

Many of you will be aware of the ongoing discussions with PCC on their rules around keeping bees on your property. Several WBA members have worked closely with the PCC Animal Control team to come up with the new proposal which is now out for consultation. Here is an extract from a Post article about the proposed bylaw:

#### "Bee poo triggers proposed animal bylaw changes in Porirua

New animal management bylaws in Porirua could limit how many beehives people can keep on their property, or mandate cat owners to desex and microchip their pets.

The proposed changes, revealed during a council workshop on Thursday, were described as the "most radical update" since the city first introduced the bylaws in 1991 and were partially triggered by long-running complaints about bee droppings.

It suggested modifying beekeeping provisions to only allow two to four hives in the suburbs depending on section size, ban hives on sections smaller than 500m<sup>2</sup>, and introduce requirements to give bees a water source and manage their flight paths.

Currently, the city's beekeepers need to register with ApicultureNZ and get permission from "affected neighbours" to keep beehives – rules that council officials said failed to prevent "bee-related nuisance". No other local councils have these rules.

"The beekeeping community have expressed frustration with these requirements, noting they are impractical," a council paper read. Officials



once considered only allowing those with a permit to have beehives but ultimately decided against it.

John Burnet, the treasurer of the Wellington Beekeepers Association, said the council's proposed rules sounded fair and reasonable. "It comes back to the definition of nuisance and that's pretty subjective," he said....."

The Post November 7 2024

### Mead Competition – Rules

Remember it's the mead competition this month. Jacob De Ruiter, a longtime beekeeper and professional mead maker, will again be judging our competition.

There are 4 classes in the competition:

- Traditional dry mead
- Traditional sweet mead
- Traditional sparkling mead
- Open Nontraditional meads using Fruit (Melomels) or Spices (Metheglins) or a combination of these.

The full rules for the competition are on the club website and can be found here: <u>https://wellingtonbeekeepers.rocketspark.co.nz/mead-competition-rules/</u>

So polish up your best bottles and bring them along in December.





#### **Interesting Links:**

Here are some interesting links on bee related matters.

Following on from last month's article about detection adulterated honey without opening the jar, the World Beekeeping Awards will not have a honey competition in 2025, due to the widespread adulteration of honey. Apimondia hope to bring back the competition when the honeys can be reliably audited for tampering offences!

https://www.bbc.com/news/articles/cjw0w921nzgo

And a story about non-honeybee pollinators.

https://www.rnz.co.nz/news/national/535055/how-queen-bees-andwasps-set-our-backyards-abuzz-in-readiness-for-summer



#### **Formic Pro for sale**

Member Graeme Chisnall is selling surplus beekeeping products:

- Formic Pro varroa treatment (2 pads per packet) RRP \$20, Graeme's price \$6
- Hawkeye Wasp Lure (Combined lure & bait) RRP over \$15 \$6, Graeme's price for combo \$14

Phone Graeme 0212468662

#### Who can I speak to?

President — Janine Davie <u>president@beehive.org.nz</u> Treasurer — John Burnet 027-4379-062 treasurer@beehive.org.nz Secretary — Jane Harding 027 421 2417 secretary@beehive.org.nz Membership - James Scott - (04) 565 0164 Web Master - Jason Bragg - (021 527 244) Librarian - Ellen Millar - (021 709 793) Supper co-ordinator - Barbara Parkinson — (04) 2379624 Swarm WhatsApp Administrator - Jim Hepburn ( 021 926823) PK Tan - 021 109 3388 Graeme Chisnall - 021-246-8662 Frank Lindsay - 027-403-4559 Millie Baker Newsletter Editor - Jane Harding - 027 421 2417