



**Next meeting** | Wednesday 4 September 2024

**Where** | Johnsonville Community Centre

**Editor** | Jane Harding [janeh@xtra.co.nz](mailto:janeh@xtra.co.nz)

**Beginners session 6.45pm. Swarms and Swarm Collecting  
– Graeme Chisnall**

**Main Meeting: 7.30pm**

**Tales from the Southern North Island Bee Group  
conference and a discussion on the AFB  
Eradication Programme**

## Contents

2. From the President
4. What to do in September
8. Varroa Treatment
9. What's Happening Science Wise – Microplastic and Microfibre contamination on honeybees and honey – Phil Lester
11. Beginner Beekeeping Course
12. Photos from SNIBG
14. Swarm Collection and Receiving a Swarm
16. Hosting Hives, Hives for Sale, Queens Available
17. AFB Eradication Programme
18. Gadgets and Gizmos
19. Interesting and Useful Links
19. Book Review – Piping Hot Bees and Boisterous Buzz -Runners by Thomas Seeley
22. Meetings for the Rest of 2024
22. Who can I talk to?



---

## From the President

September marks the beginning of the busiest time of year for beekeepers such as me who have not spent the winter months beavering away in the garage making and cleaning boxes and frames.

I attended the Sunday session of the 3 day Southern North Island Beekeepers Conference in Whanganui. The keynote speaker was Randy Oliver and the Sunday session revolved around varroa management strategies. This was a thought provoking session and made me realise just how much coping with varroa has changed. It is no longer sufficient to rely on letting the varroa build up then knocking them back in Autumn and Spring. I have come to realise how much damage these little critters are doing even though there may be no obvious signs such as Deformed Wing Virus.

My bees are going very strong so in light of Randy's message I now have to keep the varroa count low. I have made a commitment to test (using alcohol wash method) and I will apply whatever treatment is best according to my varroa decision aide which I will attach to this newsletter. If the numbers are low I will use one of the organic treatments to try and keep them that way.

September/October is prime swarming time. Every year I swear I'm going to do everything I can to prevent swarming and every year I fail to varying degrees. I'm going to do my best again this year starting with regular checks and most probably split the hive. My preferred method is to find the queen and remove her, along with sufficient brood, nurse bees and food supplies to keep them going until they can hatch some more workers and generate some field bees.



The risks at this time of year include the risk of starvation. I have “hefted” my hive and it feels like they have plenty of food but it is a tricky time of year and it only takes a few days of solid rain to keep the bees inside powering through the stores on hand. It can quickly become necessary to supplementary feed.

Janine Davie



*Bees in Cherry Blossom - Janine Davie*



---

## What to Do in September

**For those who attended the conference in Whanganui last month, I hope you enjoyed it and learnt a lot. For those who were not, you missed a good one.**

Mid August and the weather has closed in. Seems we are only having one or two days a week good flying weather, (well that's Johnsonville weather). We sort of have to expect this as we normally get a lot of rain in August but it could carry on into September. The Northern Hemisphere has a particularly wet spring early this year so we might have the same this year.

Despite the weather, we had two swarm notifications, so somebody's hives have come through the winter in very good order. Not all of my hives and some of the club hives made it through the winter. One we forgot to treat, in another the bees moved away from the strip and were very weak with varroa. Yet another has a drone layer and was overcome by the cold as there were only a few bees left.

I have been monitoring mite fall on to slides under the mesh floors each week through the winter and even this week we still have one hive with 130 mites falling. All the rest have no mites falling each week indicating that these hives have very few mites in them.

When the weather permitted, the bees have been flying well, bringing in loads of pollen and during the afternoon at the club hives at Chartwell, you could hear the hum of the bees processing the nectar they had gathered that day from Darwin's Barberry which is in full flower.

The warm winter seems to have brought forward spring nectar and pollen sources a month earlier than normal. Tree Lucerne (*Cytisus proliferus*) has been flowering for months, Karo (*Pittosporum crassifolium*), Spanish Heath (*Erica lusitanica*), Bush Wattle (*Albizzia lophanthal*), Darwins barbery (*Berberis darwinii*), Kowhai (*Sophora microphylla*), Gorse (*Ulex europaeus*),



Broom (*Sarothamnus scoparius*), Plums and Peach trees and numerous other shrubs are in flower. These are the likely stimulus that has led to early swarming. Generally swarming is stimulated when barberry, hawthorn and cabbage tree are flowering, usually starting in the last week of September.

So, what should we be doing with our hives this month.

We can inspect hives once the temperature reaches 15 C. You can check by rolling up your sleeves. If your arms feel cold, it's not warm enough to take the hive apart to do an inspection. However, there are several things you can assess by peeking into the top of the hive.

Always light your smoker and have it ready. Use only a minimum of smoke. When approaching the hive, put two puffs into the entrance and wait a minute and repeat. This will disguise the alarm pheromone the guards will have given off when they saw you approaching. After the hive is open, puff just a little on to the top bars to drive those bees looking at you down in among the frames again. This gives you control of the hive.

Hive weight = sufficient food but then again it could be all brood.

Heft the hive. Standing at the back of the hive with your arm straight down, try lifting the back of the hive off the hive stand by the top. Use your other hand to hold onto the super. The hive should be still heavy. If you're not sure, remove the roof and hive mat. Look down on the frames to see if there is capped honey in at least four outer frames. (A week's honey supply for a strong two-super hive full of bees).

If not, start feeding the hive two to one sugar / water which you will have to continue until a decent amount of nectar is being brought in by the bees.

At the same time check for moisture on the hive mat. The majority of the mat should be dry with a little condensation around the edges. This water has been produced by the bees consuming honey during the winter. With insulation on top of the hive mat, it should be dry. If wet put a match under



each corner of the hive mat to allow some top ventilation which should dry the hives within a week and then remove the matches.

Once the temperature is up to 15C, you can inspect the hive starting at the bottom board. I.e. take all the boxes off and check that the bottom board is clean. I usually take a number of clean boards with me and change them on the spot, (and water blast the dirty ones later at home).

Replace the bottom super. Are there bees in this super? Yes, then check the frames for stores, pollen and capped brood. Check the queen's laying pattern. Spotty brood can indicate varroa, a failing queen or it can be American Foul Brood. Flick off 20 or so capped cells and check the condition of the pupa underneath. (Know what each stage of the larvae and pupa look like before undertaking this operation).

If there aren't any bees in the bottom super, set it aside and put the super with bees in it on to the bottom board and then check the all the frames for disease and how the colony is doing.

Any old dark frames (you can't see light through when held up to the sun) should be removed. Don't split the brood. Keep it compact in the centre of the brood super.

Replaced any dark frame with foundation frames but put these in the super above the brood nest. Checkerboard them, one drawn, one foundation, etc. If the bees are still building out frames, they are unlikely to swarm.

Check how many capped brood frames there are. If six or more, the colony is likely to swarm fairly soon.

Check along the bottom of the super above and around the edges of the frames for queen cells. None with eggs or larvae, great. Leave any queen cell buds that are along the bottom of the frames but remove any at the sides of the frames. This will make checking for queen cells easier and quicker at your next inspection.



## **Varroa monitoring.**

If you haven't been monitoring, best select a frame towards the outside brood frame and shake all the bees off into the roof. Allow the field bees to take to the air, check that the queen is not among the nurse bees and then scoop up half a cup to put into your mite wash container which should be half full of meths or dish washing soap. Leave for about a minute and then gently swirl the containers to allow any mites to fall to the bottom. Anything more than three mites, treat. For more information -

<https://scientificbeekeeping.com/refining-the-mite-wash-part-1-treatment-threshold-and-solutions-to-use/>

Reassemble the hive and if the bees are covering six of the nine or ten frames in the top super, add another super to give the bees room to expand.

You can purchase Dawn Ultra washing liquid at the US to Us shop in the Johnsonville Mall adjacent to Newbolds, next to the liquor outlet. (\$19 a bottle)

Don't have the hive open for anything longer than 10 minutes unless its a really warm day and the bees are flying well.

## **Things to Do this Month**

Check for AFB, cull old frames from the brood nest, feed if necessary, control weeds around the hive/s. Check stored supers for wax moth; prepare replacement frames for waxing as soon as the flow starts.

If you haven't got a mite washer, Randy Oliver has put together a short presentation on how to make these out of two clear plastic coffee cups and a soldering iron. This will be demonstrated and everyone can make their own at the Gadgets and Gizmos meeting in October.

Frank Lindsay



---

## Varroa – what to do and where to get it

Varroa Destructor, the bane of a beekeeper's life is probably the major pest to most beekeepers at the moment. Frank has mentioned what to do this month and here is a [link](#) to the Varroa Check Sheet that Janine mentioned at the last meeting.

The Club has purchased a bulk supply of varroa treatment suitable for treatment of hives in spring. Costs are substantially less than normal retail price due to bulk purchasing and proximity to expiry date. All treatment packs are sealed and still effective but should be used this season.

*Apivar (amitraz based)* - two strips required per brood box. Do not use while honey supers (for human consumption) are present on the hive. Duration - 6-10 weeks. Cost - \$50 per pack of 12 strips.

*Bayvarol (flumethrin based)* - four strips per brood box. Should not be used during the honey flow. Duration 6 - 8 weeks. Cost - \$10 per pack of 4 strips.

*ApiLife Var (thymol based)* - organic treatment - one wafer per brood box (split into four sections). Repeat treatment required after 3-4 weeks. Two wafers included in each pack. Cost - \$1 per pack of two wafers.

*Oxalerine strips (oxalic acid & glycerine based)* - organic treatment - 3 strips per 3/4 brood box, 4 strips per f/d brood box. Repeat application required every 6-9 weeks. Cost - \$15 per pack of 20 strips.

Contact Treasurer John Burnet to purchase Ph. 0274-379-062





# What's Happening Science Wise

## Microplastic and microfiber contamination on honeybees and honey

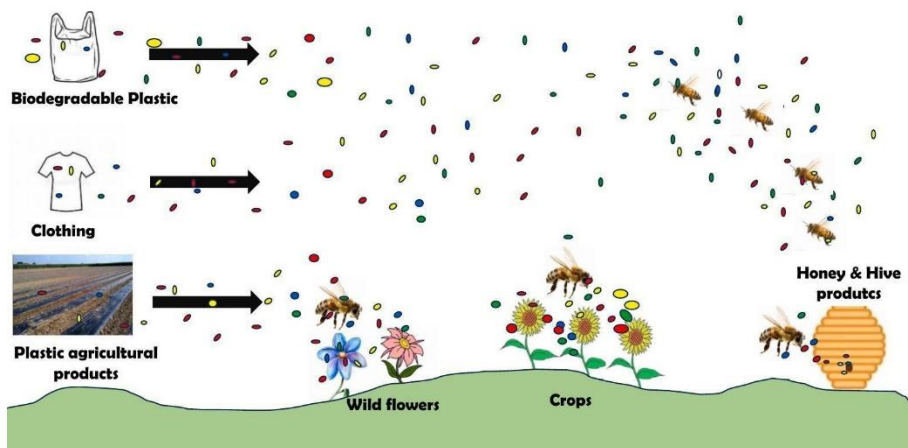
By Phil Lester

Microplastics are small plastic particles that originate from the degradation of plastics, which are exclusively human-made and have unfortunately become ubiquitous in nature. Microplastics have been detected in many marine species, as well as in drinking water and various foods.

Microfibers are a combination of synthetic and natural fibrous fragments with a diameter of less than 50  $\mu\text{m}$ . They are also ubiquitous pollutants found in different environmental compartments.

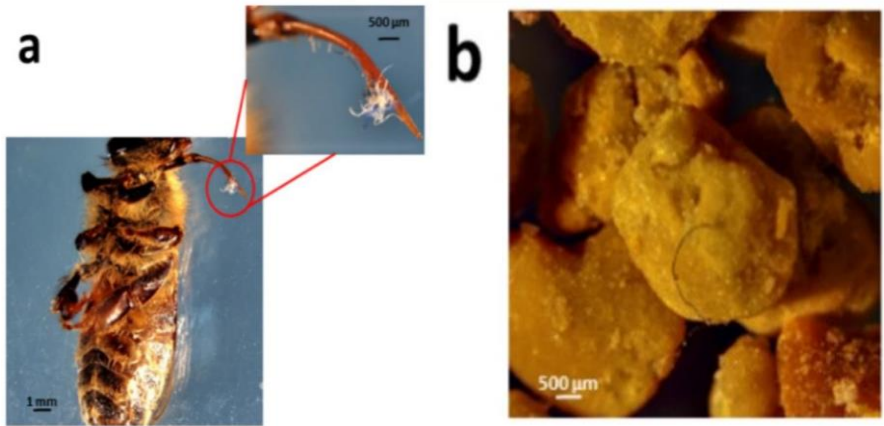
A recently published study from Italy examined microplastic and microfiber contaminants in both highly and less urbanized areas of the country.

### Microplastics contamination





They found that both honey bees and honey were contaminated by microfibers. The majority of these microfibers were of natural origin. Of the 137 microfibers found, 93 were natural, commonly made of cellulose (plant fibres). The remaining microfibers were identified as rayon, polyester, and polyamide products.



The microplastics they observed included polyethylene, polyvinyl chloride, polyurethane, and epoxy resin. The most common microplastic was polytetrafluoroethylene (PTFE), commonly known as Teflon, which was found in both honey and honey bees.

So, should we be worried? Another recent review found that microplastics can be found in a wide variety of honey bee matrices, such as honey, pollen, beeswax, and inside bee bodies. Microplastics can accumulate in honey bee tissues, including their brain, midgut, Malpighian tubules (the 'kidney' of the bees), trachea, and haemolymph.

The authors describe how microplastic contamination can decrease beneficial gut bacteria like *Lactobacillus* and *Bifidobacterium*, trigger immune suppression, and impair detoxification and energy balance in bees. One study showed that bees exposed to these particles were five times more likely to die from a pathogen.



We don't know what levels of microplastic or microfiber contamination exist in New Zealand bees. I'm hoping it isn't severe enough to cause any impact, but we simply don't know.

## References

S. Bashir, P. Ghosh and P. Lal. 2024. Dancing with danger-how honeybees are getting affected in the web of microplastics-a review. NanoImpact DOI: 10.1016/j.impact.2024.100522

M. E. Schiano, et al. 2024. Microplastic contamination in the agri-food chain: The case of honeybees and beehive products. Science of the Total Environment 948: 174698.

DOI: 10.1016/j.scitotenv.2024.174698

---

## Beginner Beekeeper Course 2024

The club is organising a course for beginner beekeepers this spring.

There will be five evening sessions on Thursdays – 5th Sep - 3rd Oct. Each session will run from 7:00 to 9:00 pm at the Johnsonville Community Centre, in the Trust room upstairs.

In addition, there will be two field days at the Club's Chartwell or Wingate apiaries on dates to be advised.

Participants must be current club members, and the course will cost \$250 per participant.

[Register for the course.](#)



## Photos from the Southern North Island Conference



*Frank, Randy Oliver and Neil Farrer listen to the welcoming speeches*



*Randy Oliver receives his taonga from Frank*



*James and Viv enjoying the ambience*



*Lawrie Duncan - caught in the act....*



---

## Swarm Collection and Receiving a Swarm

In preparation for the coming swarm season we are planning to use the same WhatsApp method that was used last swarm season.

Jim Hepburn will administer the group with support from James Worthington and John Burnet.

Swarms from the Wellington region including Kapiti for collection will be posted to the forum. They will then be collected by paid up WBC members on a first response basis.

This is a service being provided to the community and councils free of charge. I will send those final collectors some guidelines and protocols once the list is setup. If you are considering going on the collectors list then you must be sure you will be able to respond promptly. Last season we had a lot of names on the list but only a few committed collectors.

If you wish to be an active collector then please email Jim Hepburn at [cameronjhepburn@gmail.com](mailto:cameronjhepburn@gmail.com) with a subject: Swarm collector

Include your contact mobile phone number

We also need a list of members who would like to receive a collected swarm so please email Jim Hepburn at [cameronjhepburn@gmail.com](mailto:cameronjhepburn@gmail.com) with a subject: Swarm recipient

**Include your contact mobile phone number!**

Jim Hepburn  
[cameronjhepburn@gmail.com](mailto:cameronjhepburn@gmail.com)



## And if you do receive a swarm:

- Firstly, if you already have other hives, remove a frame of open brood from an existing hive, shake off the bees and place it into the swarm hive. Ensure you are not transferring the queen. This will prevent your swarm bees from absconding a second time as they start nurturing the eggs and larva.
- If you don't have an open frame of brood, block the entrance up for at least 24 hours to prevent the bees absconding.
- If the swarm contains a virgin queen, you can place a queen excluder under the bottom box to prevent the queen leaving. But after several days you will need to remove this to enable the queen to carry out mating flights.
- Immediately place a varroa treatment into the swarm box. Varroa can be a reason for bees to swarm and abscond from their original hive.
- It is suggested that you place the swarm onto several new foundation frames but you will need to sugar feed them so they can start draw out the foundation.
- Isolate the hive and monitor over the next few months, diseases such as AFB can take some time to show, and you don't want to be transferring contaminated bees and frames among your other hives.





---

## Hosting Hives, Hives for Sale, Queens For Sale

### Hosting Hives

With the pending summer months, the club is now receiving offers from members of the public to host a hive or two. A list will be published each month in the newsletter of potential hosts and their contact details and general location. It will upon members to make the initial contact, and assess the potential site

- Brett Marley who resides on a 2-hectare lifestyle block in Ohariu Valley. Brett is contactable on 0211922164 if you wish to provide a hive to two.
- Maggie Renault, 0278423235 location is Mairangi Road in Wadestown.

### Hives for Sale

Club member Abdullah Baraka from Cannons Creek, Porirua is moving to Australia and needs to sell his hives. They have been inspected today by AP2 inspector and are disease-free. Three hives are two boxes high and one is a single box hive. There are spare boxes and lids also available. Cost \$250 each. Contact Abdullah on Ph 022-098-4011 if you are interested in purchasing or want more details.

### Queens For Sale

Lion Apiaries have advised us that they have a good amount of over wintered queens available this season so if anyone is keen to get their splits done early feel free to get in touch to place an order.

Prices for the 2024-2025 season are as follows-

We again have a premium on the early season queens. The varied prices reflect the challenges of raising successfully mated queens. As you know





the weather affects our success rates and in the early spring we suffer greater losses than we do in the summer.

Overwintered Queens (early/Mid September - 29 September): \$74 + gst  
Autumn mated and have brought their colony through the winter.

2024 Early Spring Queens (30 Sept - 3 Nov): \$69 + gst  
The first of the new season queens for priority delivery.

2024 Spring Queens (4 Nov - 1 Dec): \$58 + gst  
Standard spring rates as more queens become available due to improved weather conditions.

2024-25 Summer/Autumn Queens (2 Dec 2024 - 30 April 2025): \$50 + gst  
Once the weather settles out more queens are coming back from their mating flights successfully.

---

## AFB Eradication Programme

The club is keen to progress this idea and Phil Lester from Victoria University has an idea for a student to assist us with this as a project. We'll talk a bit more about this at the meeting, again, here is the link to the programme outline from Mark Goodwin and Nick Wallingford. This programme is a method for beekeepers to eradicate AFB from a defined area. This 10 point plan is outlined in an article you can read [here](#).



## Gadgets and Gizmos Competition

Our October meeting will be a demonstration meeting of sorts, we'd like you to bring along anything you've made or modified that's useful around the hives or in your beekeeping life. The rules for the competition are fairly relaxed, the gadget or idea needs to be something you've invented, or repurposed, and the winner gets the **Beach Memorial Trophy (Innovation competition)** award for the year. So come along with your favourite gadget and show us how it makes your life easier....



*Honey Press*



---

## Interesting and Useful Links

Blood Sucking Parasites – interesting article from the Apiarist

<https://theapiarist.org/blood-sucking-parasites/>

Red Dwarf Honey Bees found in Europe for the first time

[https://www.maltatoday.com.mt/environment/nature/130833/first\\_sighting\\_of\\_invasive\\_red\\_dwarf\\_honeybee\\_in\\_europe\\_recorded\\_in\\_malta](https://www.maltatoday.com.mt/environment/nature/130833/first_sighting_of_invasive_red_dwarf_honeybee_in_europe_recorded_in_malta)

And a gorgeous film about honey bees called “A Bees Diary” It’s currently streaming live at <https://www.maoriplus.co.nz/movie/a-bees-diary>

“A look at the trial and tribulations of two particular honeybees over two years from birth to death”

It’s filmed in Canada and the photography is absolutely amazing. Highly recommended.

Thanks John, Frank and James for the links

---

## Book Review – Piping Hot Bees and Boisterous Buzz-Runners

*Piping Hot Bees and Boisterous Buzz-Runners: 20 Mysteries of Honey Bee Behaviour Solved* by Thomas D. Seeley (review has been PREPARED BY an Auckland Beekeeper Club member)

Thomas Seeley has spent a lifetime studying the behaviour of honey bees, swarming and communication in particular. After 185 publications including five books and at 71 years old you know there will be stories and research that will always fascinate. If you haven’t read any of his books, this would be a great place to start. This book is broken down into 20 chapters, each



one of which is a different simple experiment, he poses a question which becomes a journey of discovery. Starting with the regulation of CO<sub>2</sub> in a hive, he narrates a story that starts with him as a kiddie discovering a colony in a big old walnut tree. It covers bee biology and behaviour with some carefully designed experiments.

After emerging from its cell, a bee soon goes to work and as its body develops it changes jobs, two of which are the title of this book. Chapter three investigates whether it's a consensus or just some nest site scouts in a swarm that determines where a swarm will move into. This is of interest to a swarm collector and whether the swarm's departure is imminent. There are two tells, firstly a quorum of at least 20-30 scouts promoting the same site and secondly scouts can be heard piping when all bees have warmed up enough to fly: hence Piping Hot Bees.

In chapter 18, Groom Me Please, he goes into the mechanics and biology of grooming, both auto-grooming and allogrooming. The grooming invitation dance makes for interesting reading for anyone particularly interested in bee dances.

Chapter 15 investigates the tremble dance, a dance that had mystified researchers since it was first observed. Initially it had been thought of as a seizure, Karl von Frisch realised that it was communication but couldn't discern what the message was. Seeley's experiments show under what circumstances foragers would perform this dance.

One of his experiments required labelling 4,000 bees in three days so that every single bee in a swarm could be identified. Then the hundreds of hours of rewatching slow motion footage of the results of his experiments. It seems as though half the battle is framing the experiments in such a way that will answer these mysteries most efficiently without making assumptions. His studies build on those that went before him and which his students are in turn building on.

Margaret C. Nelson's illustrations and graphs complement his work and clearly describe his experiments. Thomas Seeley is one of my favourite



authors, his style is easy and interesting. He writes for beekeepers, but you don't have to be a genius graduate to understand it. He goes in depth into his experiments so you can fully get how he reaches his conclusions from the original hypothesis, although some start from observing anomalies. He breathes life into his experiments with the telling. Each chapter is like a short story: he guides you on a mini journey of bee discovery, easily swinging from anecdotes with Roger Morse, Martin Landauer and Jurgen Tauntz to those with his students and co-researchers. His narrative gives us a story akin to an Attenborough documentary, but about bees and solving some of the mysteries that we as beekeepers often see. I give it 5+ stars; definitely a stocking filler for the beekeeper in your life.

# Piping Hot Bees & Boisterous Buzz-Runners



— 20 Mysteries of —  
**Honey Bee Behavior Solved**

**Thomas D. Seeley**



---

## Meetings for the rest of 2024

October – Equipment for keeping bees – new, replaced, updated.

Gadgets and Gizmos competition and a talk from Phil Lester and Joanne Merk

November – Spring Buildup and getting a Nuc, Honey tasting and pollen and nectar sources in Wellington

December – Mead competition and Christmas party

---

## Who can I speak to?

President – Janine Davie [president@beehive.org.nz](mailto:president@beehive.org.nz)

Treasurer – John Burnet (04) 232 7863 [treasurer@beehive.org.nz](mailto:treasurer@beehive.org.nz)

Secretary – Jane Harding 027 421 2417 [secretary@beehive.org.nz](mailto: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 - 0275034559

Millie Baker

Newsletter Editor - Jane Harding - 027 421 2417