Wellington Beekeepers Association
Support and encouragment of beekeeping and beekeepers
May 2025 Newsletter

**Next meeting** | Wednesday 7th May 2025
**Where** | Johnsonville Community Centre
**Editor**| Jane Harding janeh@xtra.co.nz

Beginners session: Late autumn feeding, dealing with wasps – Frank Lindsay

**Main meeting; 7.30pm in big downstairs room at JCC**

**Movie Night! Honey Bee Democracy – video presentation by Tom Seeley of his book (see book review below)**

## Contents

# From the President

We're heading into winter and it certainly felt like it this week (or last week by the time you read this). Fortunately I managed to get my bees sorted before the southerly hit.
I have had Bayvarol in as an autumn varroa treatment. One of my hives had a high varroa load, the Bayvarol knocked it back but there were still a few mites dropping so I have followed with Apivar which I hope will finish off the last few and see them through winter. As advised by John and Frank I cut the Apivar strips in half and put them in at a rate of 4 small strips per box rather than 2 large. I don't like using two synthetic treatments back to back but I didn't think oxalic acid would have the required knock down and I didn't want to run the risk of killing the queen by using formic acid. I'm not familiar with formic acid and would feel safter using it in spring or summer. I hear that winter is expected to be warmer than usual and we have comparatively mild winters in Porirua so I don't expect there will much of a brood break to assist with varroa control.

I see that the Colony Loss Survey results are out. We are hoping to have Pike Brown speak to the club about the results later in the year. It is good to see the overall loss rate is statistically lower than previous years and losses attributed to varroa have reduced from 6.4 % to 4.6%. I note that very few beekeepers are using no varroa treatment and that a lot of commercial beekeepers are using oxalic acid. I urge you to have a look at the latest Colony Loss Survey results which can either be viewed here: 2024 New Zealand Colony Loss Survey – Infographic or subscribe to the Apiarists Advocate which is an excellent read for all things relating to New Zealand Beekeeping. (copy of the infographic also in the newsletter – ed)

I would like to acknowledge the excellent work done by some members of the Wellington Beeekeepers Association. I may be repeating myself and please excuse me if I have missed anyone, this is certainly not an exhaustive list, just a few people that I thnk should be acknowledged. James Scott has

done some great work lately updating the constitution (which is a legal requirement). There will be more information about this at the AGM. I would also like to acknowledge the efforts of Jim Hepburn in managing the swarm callouts over summer. I know he's had a lot of calls and his work in this area is much appreciated. John Burnet has been super helpful as usual dealing with the varroa treatments and the purchasing and distribution of the refractometers. Jane Harding is doing an amazing job as club secretary, compiling the newsletter and a huge amount of work in the background organising speakers and a hundred and one other jobs. Our AGM is in July and it would be great to see some other club members put their names forward and at least join the committee so we can spread the load a bit.

I have had an enquiry from a couple in Whitby who are keen to host some bees at their property. Please see me if you are interested.

Janine

# Honey Competition Results

A good turnout of entries for the honey competition, but no comb honey this year. Frank judged the competition and made the following comments:

In judging the competition, a lot of the honey sample were in the 19% moisture range which is a lot higher than usual. This is perhaps a reflection off the weather over Christmas- New Year. The honey would have been capped be just before this and then during that wet couple of weeks the honey probably took on moisture.

I would recommend that members purchase a honey refractmoter from Aliexpress (see link) or the club could take orders for these and purchase a bulklot (approx $17 with the case). This is much cheaper than when I was purchasing, my first cost over $300.

By sampling honey from the outside frames and middle frames it's possible to work out the overall moisture content of the honey. If its about 18.6% the boxes could be stacked in a small room with a fan playing on the boxes

(on the ends) with a dehumidifier running for a few days to a week until the moisture got down to 18%

Alternative if the honey is already bottled its possible to put them in a fridge with the lid removed for a few days, however, be careful that the honey doesn't take on a taint from something in the fridge (e.g vegetables)

**And the winners are…**

In the creamed honey category, there were 11 entries, and the placings went to

1st Chris Howard
2nd Claire Hart
3rd Mark Wendelken

In the liquid honey category there were 8 entries, and the placings went to

1st John Randall
2nd Tony McCombs
3rd Ben Scott

John Randall takes home the Bodmin Cup.

*Frank congratulates John Randall on his honey competition win*

# Mead making

As well as the honey competition at the April meeting, members were introduced to the fine art of mead making by Richard Braczek. Richard has kindly shared his notes and some recipes with us:

## Making a Traditional Mead

If you want to try making some mead, here are the steps and recipe for making a traditional mead. You can make mead just using honey, water and yeast, but adding some tannin and acid will give it a better balance. Also, some yeast nutrient will help the yeast do its work better.

**Equipment You'll Need – Makes 1 Gallon / 4.5 Litres**

Small Fermenting Bucket
1 Gallon Demijohn / Carboy
Siphon
Bung & Airlock
Hydrometer
Thermometer

Ingredients

- 1.5kg of honey
- 4.2 litres water (preferably not from the tap).
- 1 tsp nutrient
- 1/4 – 1/2 tsp acid blend
- 1/4 teaspoon tannin powder
- 1 sachet of mead yeast

Method

1. In the fermenting bucket add half the water and then stir in all of the honey to thoroughly mix. Add the yeast nutrient and then the rest of the water and once again stir to thoroughly mix. You can add the acid and

tannin now or after initial fermentation. You can use a hydrometer to check the specific gravity and add more honey if necessary, depending on the sweetness of the mead you want. (Specific gravity needs to be between 1.060 and 1.120).

2. Make sure the must is between 15°C – 20°C and find a suitable place to keep the fermenter where it will maintain this temperature. Add the yeast to the mead by sprinkling onto the surface.

3. Fit the lid and an airlock to the fermenter and leave to mead to undergo primary fermentation. This vigorous fermentation should last roughly a week or more.

4. After the initial burst of activity has died down, or at around 12 days, you want to transfer the mead to a demijohn/carboy. Transfer carefully using a siphon to avoid splashing. The demijohn should be full, fit a bung and airlock and leave the mead to condition.

5. You will want to condition the mead for at least 3 months or longer. Rack the mead to a clean demijohn as sediment builds up at least once or twice during this time. You can take this time to take another hydrometer reading should you wish and sample the mead. If you find it needs more acidity add acid blend in small amounts until you feel the mead is balanced. This is personal, you may find you need no acid addition or very little. It is best to add too little rather than too much. You could also add more honey to sweeten it before bottling. However, you will need to use some wine stabiliser (Potassium Sorbate) and a Campden tablet to prevent refermentation before you do this.

6. After conditioning and clearing completely, package in bottles and cork or cap. The mead will continue to get better for years as it ages so try and keep hold of some for at least a year or more..

If you are after a recipe that produces a good result in a short time (about 6 weeks), you could try this one:

**Orange Spice Quick Mead Recipe**

- 1.6 kg honey
- 1 cup orange juice
- 2 dozen raisins (to give the yeast some extra nutrients)
- 1/4 t cinnamon
- 1/4 t nutmeg
- 1/4 t allspice
- 1 package brewing yeast
- Water to make 5 litres of mead

**Making your own recipes**

Here is a pictorial guide to making mead from WikiHow and here are some guidelines for making your own recipes:

- 5 litres of water
- 1.6kg honey
- Packet of wine or mead yeast
- Add 500g of fresh fruit, or
- 1 cup of fresh herbs, or
- 2tbs dried herbs, or
- 2tbs spices

Use a hydrometer to check the specific gravity of your must (before you add yeast). It needs to be between 1.060 and 1.120. When fermentation stops the specific gravity will be 1.0.

Taste and adjust for acidity and sweetness, if necessary, before bottling (see above).

**Using cappings to make mead**

You can use cappings to make mead. Add a litre of water (1kg) to the cappings to dissolve the honey. (Add more water if needed but in I litre lots and note how many litres you've put in). Strain out the wax and weigh the remaining water and honey mixture. Deduct 1kg for each litre of water

you've added and the difference is the amount of honey you have. Add extra honey to make up the quantity for your recipe as needed. You can use a hydrometer to check the specific gravity.

Good luck!

# What's Happening Science-Wise?

## Vaccines for bees? An AFB vaccine provides protection from Deformed Wing Virus By Phil Lester

Research from over a decade ago showed that feeding honey bee queens with heat-killed American foulbrood (AFB) spores could act like a vaccine, 'priming' the immune system of the queens' offspring. The treatment functioned like a vaccine by giving worker bees a level of resistance to AFB. This resistance wasn't complete: the 'trans-generational immune priming' treatment increased bee survival by approximately 26% (Hernandez Lopez et al., 2014).

This initial work involved injecting individual queens with the heat-killed AFB. Subsequent studies confirmed the benefits of this trans-generational immune priming but used oral delivery instead. In these studies, the dead AFB bacteria were blended with sugar and corn syrup before being fed to the queens. The authors found that infection with AFB could be reduced by about 30–50% in laboratory settings using this approach (Dickel et al., 2022). It's not really vaccination as we typically understand it. Insects lack antibodies, so their immune system functions differently from ours. It appears that information about the pathogen is transferred to the next generation via an egg yolk protein called vitellogenin. This protein seems to carry pieces of AFB that help prime an immune response in the next generation of bees.

The development of this AFB vaccine has been commercialised by a company called Dalan Animal Health (https://dalan.com). Beekeepers in the US can now purchase the vaccine directly from Dalan to feed to their queens, or they can order vaccinated queens and packages from listed suppliers. For example, companies may sell an AFB-vaccinated queen for around US$60, compared to US$45–48 for an unvaccinated queen.

An additional study on vaccinated queens, published last year, revealed some fascinating results. Earlier trials by Dalan had hinted that AFB vaccination might also offer protection against European foulbrood (EFB) and Deformed wing virus (DWV). In a much larger trial, vaccinated queens were placed in 200 colonies and compared to 200 colonies with non-vaccinated queens. At the outset, colonies had similar numbers of Varroa mites and levels of DWV. Mite numbers increased over time and ended up similar in both groups—so the vaccination had no impact on Varroa. However, DWV levels were, on average, 83% lower in colonies with vaccinated queens. A second study, using the same design in South Dakota, involved 100 vaccinated and 100 unvaccinated queens. Four months after the trial began, DWV levels were 90% lower in the vaccinated colonies (Sebestyen, 2024). This appears to be a genuine effect. The specific mechanism behind these effects remains unknown. It may be that the vaccine upregulates the bees' immune system. If so, this raises the possibility of broad-spectrum protection against other diseases.

This technology is not yet available in New Zealand. But given its broader disease-controlling potential, it may be well worth investigating in the future.

References

Dickel, F., Bos, N. M. P., Hughes, H., Martín-Hernández, R., Higes, M., Kleiser, A., & Freitak, D. (2022). The oral vaccination with *Paenibacillus larvae* bacterin can decrease susceptibility to American Foulbrood infection

in honey bees — A safety and efficacy study. *Frontiers in Veterinary Science 9*, 946237. https://doi.org/10.3389/fvets.2022.946237

Hernandez Lopez, J., Schuehly, W., Crailsheim, K., & Riessberger-Galle, U. (2014). Trans-generational immune priming in honeybees. *Proceedings of the Royal Society B: Biological Sciences, 281* (1785), 20140454. https://doi.org/10.1098/rspb.2014.0454

Sebestyen, T. (2024). A Vaccine for Deformed Wing Virus? New vaccine for AFB may have wider benefits.

*American Bee Journal, November, 2024,* 1-2. https://doi.org/10.1101/2024.07.01.601551

You can see video and find publications from Dalan at https://dalan.com/media-publications/


*Bee with Deformed Wing VIrus (photo credit Copper Bee Apiary)*

# Testing for Tutin

It appears all members have now completed their honey extraction for the season so our next shipment of tutin test samples to the lab will be our last one. If you want your honey tutin tested please bring your sample to the meeting on Wed 7 May or deliver to me before Fri 9 May preferably in a standard plastic specimen jar with screw top lid. I will have some of these sample jars available at the meeting or you can pick one up from me at any time. Cost for composite testing is $20 per sample. I should add that we have sent 27 samples to the lab since 1 Jan 2025 for tutin analysis and all have passed.

Any enquiries to:

John Burnet
Phone 0274-379-062

# AFB Hive Destruction Reimbursement

All members are reminded that $7.50 of their annual subscription is retained by the Club to reimburse hobbyists who have had to destroy an AFB infected hive over the past year. Current reimbursement amount is $180 per hive capped at a maximum of two hives per member. Actual refund amount per hive for this year will be discussed and confirmed at the AGM in July based on number of claims received and funds available.

This refund is similar to an insurance policy but is not designed to fully compensate a member for a destroyed hive (probably valued at $400 - $500). The refund is intended to encourage members to replace the destroyed hive and regain the pleasure and enjoyment of backyard beekeeping.

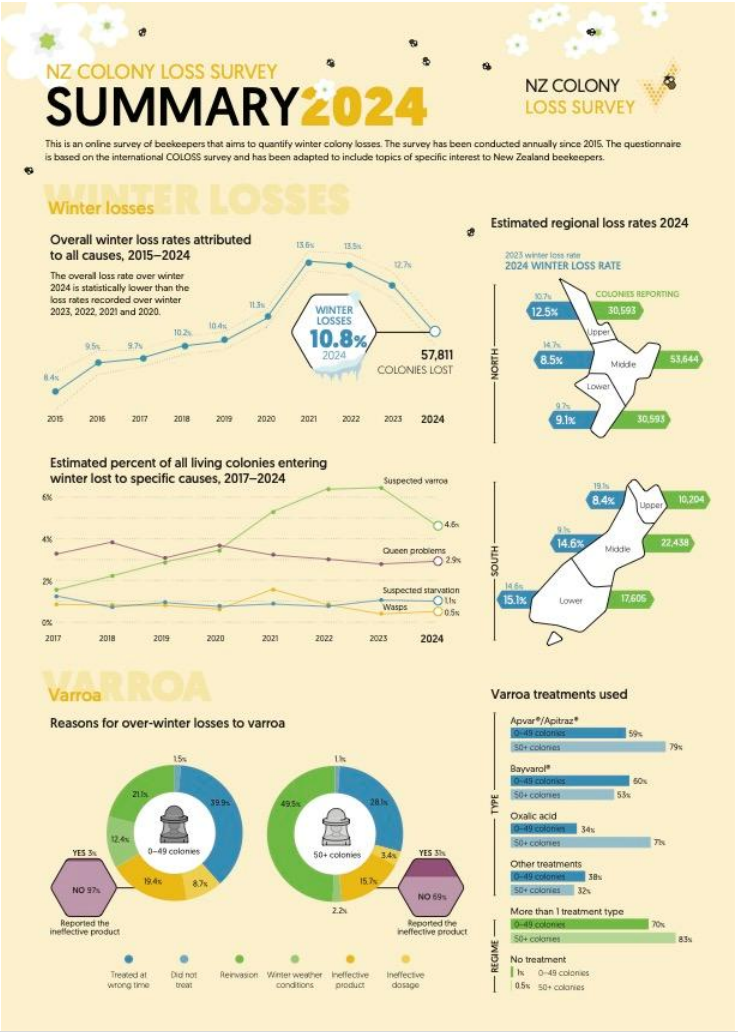
If you have had to destroy an AFB infected hive and wish to claim on the fund, please advise Treasurer (treasurer@beehive.org.nz) of the approx. discovery date, confirm destruction of the hive and advice to the National AFB Pest Management Agency as required by law.

Thanks John

*Photo courtesy of Chris Crook*

# NZ Colony Loss Survey results

Most of you would already have seen the Colony Loss Survey Results from Pike Brown at Landcare Research. We're reprinting the graphic presentation of the results so all members can see them.



## Pollination services


of beekeepers with 50+ colonies provided commercial pollination services

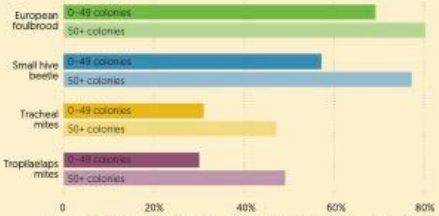

of their colonies were used for commercial pollination

102,466 colonies providing commercial pollination services

The average colony commercially pollinated...


## Biosecurity

Beekeepers generally had more confidence in being able to identify signs of European foulbrood or small hive beetle, which may be because these have more obvious visual signs in beehives.

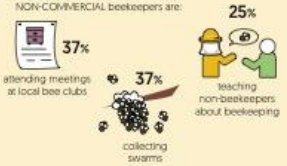



Beekeepers are somewhat confident that the biosecurity system could detect new pests and diseases and not at all confident that the biosecurity system could eradicate them.


## Industry practices

27% of non-commercial beekeepers and 11% of commercial beekeepers are essentially solitary.

The most common activities among NON-COMMERCIAL beekeepers are:




The most common activities among COMMERCIAL beekeepers are:


**10%** registered beekeepers have **0 colonies**

Beekeepers with no colonies were asked why they are registered.


## In a 'queen cell'

We surveyed 2,828 beekeepers, who collectively had 153,856 colonies. We estimate that 10.8% of New Zealand's colonies were lost in New Zealand during winter 2024. This means 57,800 colonies died over winter, from a total of 535,185. It is the second year in a row where winter loss rates have fallen, and reverses a long trend of increases. Loss rates were lower this year because varroa did not kill as many hives. Only 4.6% of all colonies died from varroa during winter 2024 compared to 6.4% during the previous winter.

Commercial beekeepers (those with more than 50 colonies) represent approximately 10% of all registered beekeepers and manage approximately 94% of all registered colonies. However, the majority of beekeepers are non-commercial (1–49 colonies). About 10% of registered beekeepers do not currently keep any bees, although most plan to return to beekeeping.

Non-commercial beekeepers said the main reason they lost colonies to varroa during winter was that they had applied varroa treatment at the wrong time. The main problem commercial beekeepers had with varroa was reinvasion of their hives. Even though beekeepers generally considered their varroa treatments were effective, 19% of non-commercial and 16% of commercial beekeepers said they lost colonies over winter because the products they used were ineffective. If a product had failed, most beekeepers said they did not report it to anyone (e.g. authorities or manufacturers).

Questions about beekeeper perceptions of biosecurity were new in the 2024 survey. Most beekeepers were at least somewhat confident that they could identify the signs of European foulbrood or small hive beetle. However, beekeepers were less certain that they could identify the signs of tracheal mites or tropilaelaps mites. Overall, beekeepers had some confidence that the biosecurity system (described as a collaborative effort in which every New Zealander has a role to play) could detect exotic pests and diseases, but beekeepers were much less confident that these exotic pests and diseases could be eradicated.

Pollination was an important activity for commercial beekeepers. More than 102,000 colonies were used for commercial pollination during the 2023/24 season, with each colony pollinating an average of 1.5 commercial crops.

Manaaki Whenua Landcare Research

View additional results at: www.landcareresearch.co.nz/bee-health

Biosecurity New Zealand
Ministry for Primary Industries

Data summary commissioned by Ministry for Primary Industries

# Who Owns a Swarm?

Here's a great story from one of our Club members James Withington

Greetings readers, I suspect this topic may have been covered before, but there is some conjecture among swarm collectors and owners as to when you own bees and when you don't particularly during the swarming period.

My understanding and happy to be corrected, is that the general rule is when the bees occupy your hives, they belong to you. If they swarm and cluster/settle within your property, they are still your bees. If they cluster/settle in a neighbouring property or beyond they are no longer your bees. However, if you notice your bees have swarmed to a neighbouring property and with the permission of the property owner you can retrieve them. But if someone else collects the bees, they become theirs and you have no right to claim ownership.

I believe there is some long-standing unwritten rule around this, which someone may be able to include in a subsequent posting.

And here is a reference from a century ago, that indicates this is not a new problem!

From Otago Daily times 1919

James Batstone, of Fairfield Park, Bath, claimed £9 from Herbert Rumming, a neighbour, the value of a swarm of bees, which the defendant, it was claimed, had seized. Counsel for the plaintiff claimed that the ownership of the bees remained with the original owner as long as he kept them in sight.

The case for the defence was that they were not kept in sight, and so ownership was lost. The judge said it had been clear for hundreds of years, under the law laid down by the Emperor Justinian, that a swarm of bees

belonged to a man as long as they were in his sight, and could easily be pursued.

Otherwise they became the property of the first person who saw them. This swarm had not been in the owner's sight when it went from the hive, or when it was on its way to the hedge, 100 yards away, where it was found.

The law to-day was just as it was hundreds of years ago. If a man did not keep the bees in sight, they became the property of anyone who found them. Judgement would be for the defendant.

And from Nick Wallingford BOP Beekeeping:

When I wrote a series of articles for the NZ Bkpr magazine, the editor used a small woodcut called "Tanging the Swarm", with an image of someone following a swarm, and banging on pots and pans as they followed. I initially had heard that the loud banging would cause the swarm to settle to the ground. But it turned out the noise was the means to establish that the owner still had the swarm in sight. So as long as you keep tanging, the swarm could still be yours. I'm not sure I would want to test this out in my neighbourhood….

*No tanging , no bees to reclaim...*

# Review of Club Constitution

As you may be aware, all clubs and incorporated societies are required to review their rules (or constitutions, as they are now known) and reregister their society with the Companies Office. This requirement is part of the Incorporated Societies Act of 2022.

The committee has had a new constitution drafted (thank you James Scott). At this years AGM in Juily there will be a vote to adopt this new constitution to meet the requirements of the Act. The new constitution is available to view on the club website at "https://beehive.org.nz/new-constitution"

If you wish to make comments or have questions, please contact James Scott: james@scott.gen.nz

# Book Review – Honey Bee Democracy

We are bringing back the book reviews to our newsletter. This time, we are trialling getting an AI book review. ChatGPT has been used to generate this book review, we'd love to know if you think this is a good idea, and it will great to compare this review with the movie we are going to see on Wednesday. Let the editor know what you think! (And apologies for the American spelling…)

## Book Review: *Honeybee Democracy* by Thomas D. Seeley

Thomas D. Seeley's *Honeybee Democracy* is a fascinating deep dive into the world of honeybee swarms and how they collectively make complex decisions—particularly, how they democratically choose a new nest site. Blending engaging storytelling with rigorous scientific research, Seeley

delivers a book that is both accessible to general readers and enriching for biologists or behavioural scientists.

**Strengths**

- **Scientific Rigor with Accessibility**: Seeley, a professor of biology at Cornell University, presents decades of his own research alongside that of others in a way that's clear and compelling. The book avoids jargon without diluting the science, making it a great read for curious minds of all backgrounds.
- **Fascinating Subject Matter**: The idea that thousands of bees can reach a consensus without a central leader is both surprising and deeply thought-provoking. The book offers an intimate look at how decentralized systems can function effectively—a theme with obvious parallels in human societies.
- **Strong Narrative Structure**: Each chapter builds logically, from the biology of swarming to the discovery of the quorum-based decision-making process. Seeley brings his fieldwork to life with vivid descriptions and photos that help readers visualize the behaviour of the bees.
- **Broader Implications**: The final chapters draw connections between bee behaviour and human democratic processes. Rather than feeling forced, these analogies are grounded in thoughtful comparisons and offer genuine insights into decision-making, leadership, and group dynamics.

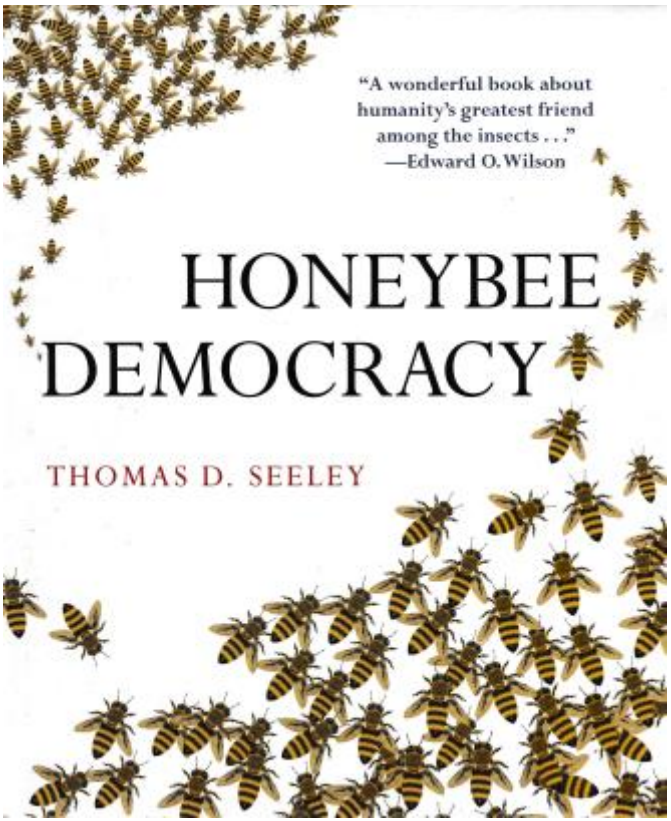
**Weaknesses**

- **Repetition at Times**: For readers already familiar with entomology or swarm intelligence, some explanations and descriptions may feel repetitive. Seeley is thorough—sometimes to a fault.
- **Focused Scope**: While the title promises “democracy,” readers should know that the book focuses very specifically on the nest-site

decision-making process. Those seeking a broader treatise on bee behaviour or insect societies may need supplementary reading.

**Verdict**

*Honeybee Democracy* is an enlightening, well-researched, and surprisingly inspirational book that highlights the elegance of collective intelligence in nature. Seeley's writing reflects both a deep respect for honeybees and a compelling interest in what humans might learn from them. It's a must-read for fans of science writing, systems thinking, or behavioural ecology.



# Top Feeders to Give Away

I have a large number of **unassembled,** unused wooden top feeders (see photo) available free to members (ex- commercial beekeeper's stock). All wooden parts are cut to size and routed ready for assembly with a piece of pre-cut plasticised 3mm core-flute board (also supplied). Following assembly, feeders will need a bead of sealant along all edges to make them leak-proof. These top feeders can be used for either dry sugar, sugar syrup, cappings or wax comb that you want cleaned up by bees. This feeder is fitted under the hive mat and as you can see from the photo, bees come up through the slot from underneath to access the feeder.

I will have some samples available at the meeting on Wed 7 May. I also have some free used metal roofs available – each with a sheet of polystyrene glued to the underside.

All enquiries to :
John Burnet (Treasurer)
Ph. 0274-379-062

# Who can I speak to?

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