

August 2024 Newsletter

Next meeting | Wednesday 7 August 2024 Where | Johnsonville Community Centre Editor | Jane Harding janeh@xtra.co.nz

Beginners session 6.45pm. Legal requirements for keeping bees – John Burnet

Main Meeting: 7.30pm Varroa Treatment Options, including brood breaks, thymol treatments, oxalerine strips, as well as conventional miticides, etc. Frank, Janine, John and others will give an overview of the various treatments available and the pros and cons of each

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From the President

This is my first message as President of the club and for those that don't know me I have been keeping bees in Papakowhai, Porirua for about 8 years. I have been largely successful in keeping my bees alive, sometimes more by good luck than good management. I am lucky to have my hives in the back garden where I can keep a close eye on them but sometimes it is hard to do in the cold, wet weather we have been experiencing lately.

It was good to see such a good turnout for the AGM last month. I would like to take this opportunity to acknowledge our outgoing president, Tricia Laing. Tricia has made a tremendous contribution to the club and to individual members with advice on keeping bees in the Akatarawa Valley in Upper Hutt, beekeeping using Top Bar and Langstroth hives, presentations on craft ideas using beeswax and, together with John Burnet, a huge amount of work on submissions to the local councils on their beekeeping bylaws.

Thank you to the members who entered the photo competition and congratulations to the winning entry "Bees Plus" from Jim Hepburn, a very popular choice by a show of hands.

I would also like to thank Phil Lester for his exceedingly generous gift of books "Healthy Bee Sick Bee" The Influence of Parasites, Pathogens, Predators and Pesticides on Honey Bees, written by him. I was lucky enough to get a copy which I have read from cover to cover. This book is full of information we all should be aware of (though perhaps not in quite the detail that Phil covers). It reminded me that we are incredibly lucky to have such a depth of skills, knowledge and experience within the club. I know in my early days of beekeeping I relied a lot on more experienced members of the club, particularly John Burnet. I think you all have something to contribute to improve the collective management of our



hives. I am hoping we can do some more member profiles in the form of presentations or newsletter articles.

The Southern North Island Beekeeping Group Conference 2024 is on in Whanganui next weekend, commencing on Sunday 11 August with a day which will be of great interest to the hobbyist beekeeper - with quite a bit of emphasis on combatting our arch enemy varroa (I wonder what beekeepers talked about before varroa came along). Other topics covered on Monday and Tuesday include AFB, breeding for mite resistance, wasp eradication, queen breeding, honey and Colony Loss Survey results. This is not an exhaustive list but I'm looking forward to attending on Sunday and hearing about the other days from those members who are attending for the 3 days. It's not too late to register...

I will be interested to hear the results of the latest Colony Loss Survey. I noted in Phil's book that in the 2018 survey, Hobby Beekeepers had a far higher rate of loss compared to Commercial Beekeepers (33.4% compared to 9.2% and 13.5% for commercial operators). I hope that as a club we can share information and work together to improve these statistics.

Janine Davie, August 2024

Committee Members 2024

The other committee members elected or returning at the AGM are:

John Burnet – Treasurer Jane Harding – Secretary Ellen Millar – Librarian

PK Tan, Barbara Parkinson, Millie Baker, Jim Hepburn, James Scott Graeme Chisnall, Frank Lindsay



Photo Competition Results

As mentioned by Janine, the photo competition this year was won by Jim Hepburn whose image "Bees Plus" got the most votes in our people's choice judging.

Jim has kindly agreed to us reproduing the image here:



Wax Dipping Session

The Club plans to organise a wax dipping session for members at John Randall's place in South Karori towards the end of August (date to be confirmed). Assembled new and used boxes will be dipped by John in hot paraffin wax at 160 degrees C. Paraffin wax dipping is one of the most effective means of protection of hive-ware against decay. (Please note : AFB infected hive-ware MUST NOT be treated in our wax dipper. Our Club and our wax dipper are not authorised by the National AFB Management Agency for treating AFB infected hive-ware. By law all AFB infected hiveware must be burned).

Boxes can be used immediately after dipping without being painted (i.e. left in a natural wooden state) or painted while still hot as the paint is drawn into the timber by the cooling wax. Alternatively the boxes can be painted at a later date after the wax has hardened and the boxes have cooled. Sometimes however water-based paints will not easily adhere to the waxed finish.

All used boxes for dipping must be thoroughly scraped and all propolis and residue beeswax removed for effective paraffin wax penetration and to preserve the purity of the paraffin wax. Please note that hot wax dipping boxes which have been previously painted will cause the paint surface to blister and peel and therefore boxes are likely to need re-painting after dipping.

Cost - \$5 per box (to be paid in cash to John Randall when delivering boxes). Boxes can be dipped by John on dipping date while you wait or delivered to John in advance and collected afterwards. Further details including a dipping date will be circulated when finalised.

SNIBG conference 11-13 August (Southern North Island

(Southern North Island Beekeepers Group)

You will have seen the email notice about the upcoming SNIBG 3 day conference in Whanganui. In case you missed it, here it is again:

One thing learned at conference can pay back for years.

There's a surprise in your gift bag. How to make a cheap efficient mite washer. No varroa surprises at the end of the honey flow. Robbing season, re-invasion is a real problem. Queen rearing in the field. Know what AFB type ERIC II looks like. Know what to expect if we get Small Hive Beetle.

Just some of the things you will learn at conference.

All enquiries lindsays.apiaries@gmail.com

Day 1 (Sunday 11th) is a beekeeping skills day and is particularly applicable to hobby beekeepers.

What's Happening Science Wise – Phil Lester

Resistance to Varroa is transmitted by the queen and not via worker learning

Bumble bee workers learn from their fellow nestmates. One bumble bee will watch her sister and copy her behaviour, so different behaviours can be passed within and between bee cohorts. A recent study led by bee researcher Stephen Martin in England investigated whether honey bee workers similarly learn hygienic behaviours from each other or if they primarily inherit the behaviour from their queens.

To test if workers learn hygienic behaviours or inherit mite cleanliness, the researchers re-queened hives. They replaced known mite-resistant colonies with queens susceptible to Varroa in both Hawaii and the UK. They also placed queens that had displayed resistance to Varroa in susceptible colonies. Then, they waited up to a year before measuring mite abundance in each hive.

The mite levels in colonies headed by susceptible (mite-naïve) queens or their daughters substantially exceeded those found in colonies headed by resistant queens or their daughters. The results suggest that the queen is key for mite resistance.

The experiment's results were confirmed by artificially infesting cells with Varroa. The mite removal rates of artificially inserted Varroa fell in the group of colonies headed by mite-naïve queens. The high levels of mite removal found in the resistant colonies did not change. Workers from resistant queens were able to find and remove many of the mites.



The presence of resistant or susceptible workers did not affect the results. The workers displaying mite resistance at the beginning of the experiment had the opportunity to teach the next generation to clean out Varroa. However, if the resistant queen was replaced, the resistant behaviour disappeared.

The difference in removal rates was substantial for this strain of bees. The key trait of 'removal of infested cells' in Hawaii consistently showed a high level of 70% in the resistant colonies, whereas it was just 45% in the colonies headed by mite-naïve queens.

The authors conclude that to propagate mite-resistant traits, beekeepers should re-queen a colony with a locally mated queen from an established resistant population. They describe how using resistant queens in the UK and Hawaii allows beekeepers to manage their bees without the need for miticide treatments.

That sounds awesome.

Reference:

Martin, S.J., Grindrod, I., Webb, G. et al. Resistance to *Varroa destructor* is a trait mainly transmitted by the queen and not via worker learning. Apidologie 55, 40 (2024). https://doi.org/10.1007/s13592-024-01084-6



Beeswax products returned to the Beehive – Tricia Laing

I am following up on the presentation I gave at the May meeting at the request of some of the club members. The book on which the recipes are based is Petra Ahnert's (2015) *Beeswax Alchemy*.

Thyme oil impregnated strips for varroa treatment

The recipe for the strips to treat varroa is based on the recipe for making waxed cotton sandwich wraps on page 98. This recipe will yield 8 strips enough for 2 boxes of brood.

- in an electric frypan heat 100g of beeswax and add 8 to 10 drops of thyme essential oil.
- cut the linen or cotton into strips long enough to make a pocket at the top to insert an ice block stick, and to reach the from the top to the bottom of the frame in the brood nest.
- make a pocket at the top by either machine or hand sewing. The pocket should then have two vertical lines of stitches in the middle so that the ice block sticks go into about a third of the way.
- cut below the stitching so that when the ice block stick are inserted the top can be folded to rest above the top of the frame
- immerse the strips in the heated oil until the fabric is saturated. There is no need to get rid of excess wax



Wellington Beekeepers Association

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Treated strips of linen with beeswax, and essential oil of thyme for treating varroa



Strips hanging in the hive

Hive Box Polish

The Recipe for the polish is Solid Wood Polish on Page 91 which yields 235ml of polish.

In a double boiler combine

- 75g yellow wax
- 75g boiled linseed oil
- 75g turpentine
- 8-10 drops of essential oil

Stir occasionally. When it has all melted transfer to a wide-mouthed jar or tin. I apply the polish to the inside of the hive boxes liberally and then let them rest in the sun until the wood has absorbed the polish.





AFB Eradication Programme

Those of you at the AGM will have heard Frank and Phil Lester talk about the AFB eradication programme being advocated by 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 <u>here</u>.

The WBA is keen to gauge interest in undertaking this programme in our area of interest, so look out for more information on this from the committee.

Honey Wanted

Bee Fresh Farms (a local honey producer) is looking to obtain a bulk supply of local wild flower or multi-floral honey.

Either extracted or in honey frames requiring extraction.

Minimum Quantity -25kg or 9 -10 fully drawn/filled frames.

Wholesale price approx. \$7.50 - \$8.50 per kg + GST will apply.

Ultimate price paid will depend on extraction/tutin testing costs if needed.

Contact Treasurer - John Burnet, Phone 0274-379-062 or email

johnrburnet@gmail.com.



Meetings for the rest of 2024

- August Legal requirements for keeping bees and updates on varroa treatment options
- September Swarms and swarm collection and VUW research updates (tbc)
- October Equipment for keeping bees new, replaced, updated and hopefully our Gadgets and Gizmos quiz
- 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 <u>president@beehive.org.nz</u> Treasurer — John Burnet (04) 232 7863 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 Janine Davie

Millie Baker

Newsletter Editor - Jane Harding - 027 421 2417