



Next meeting | 7th August 2019

Where | Main Hall, Johnsonville Community Centre, Moorefield Rd

Editor | Eva Durrant edurrant@xtra.co.nz

Topics for August meeting

Beginners session Upstairs meeting room 6.45pm

Topic *Preparing for a new season*

Main Meeting In the main hall at 7.30pm

Topic *Photographic competition*

Wax rendering and how to do it

Using beeswax

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Dr Sammy Ramsey Guest speaker WBA AGM 2019

Members were amazed by Dr Sammy Ramsey, a researcher from Maryland, when he talked about his research for a PhD at the University of Maryland. Sammy's style was engaging, fun and very informative.

Dr Ramsey is an entomologist and has done extensive research on Varroa Destructor. In particular, he has researched the food source of varroa mites. Our assumptions about varroa feeding on bees have not been confirmed by experimental research, because feeding is difficult to observe. Original research done in Russian and Chinese and not well translated into English. Scientists assumed that blood is being consumed based on the volume of body tissue consumed.



Research and Observations:

1. Mite frass (faeces) showed high levels of purines (a result of the breakdown of meat), not blood. Also blood consumers have digestive systems that excrete all the excess fluid, varroa do not have this digestive system.
2. Varroa are not related to other blood sucking mites. They are closely related to mites that inject enzymes into their prey to dissolved tissue and suck up the "soup"
3. Mites are very specific to where they eat, 95% feeding on the underside of the bee. Mites found on the thorax are not feeding, they are looking for another bee to feed on or for a foraging bee leaving the hive.

Varroa treatment in the US is patchy, often because beekeepers don't think they have varroa, based on visual observation only. But when you can see varroa on the thorax it is too late.



Dr Sammy Ramsay (cont)

Fat body (liver) is what is targeted by varroa, consuming large parts of the bee's fat body. Dr Ramsay confirmed this by using two different colour stains in the sugar syrup fed to his research bees. One colour stained bee fat and the other colour stained bee blood. Varroa that fed on the bees picked up the colour stain

associated with the fat and not with that associated with the blood. This phase of Dr Ramsay's research took several months to perfect.

Wounds caused by the varroa are hidden by the plates on the bees' bodies. Varroa wedge between the plates and punch holes through the thin membrane.

Fat Body very important for growth and development, also for metabolic activity and nutrient storage and controlling water loss and temperature regulation. Assists with pesticide detoxification. Fat body creates anti-microbial peptides, if fat body is missing the bee is less able to cope with pesticides and bacteria. Also essential for wax development. Varroa affected bees are compromised in many ways, leading to an overall decline in bee and hive health.

Apis mellifera (European honey bee) have no natural defences against varroa, unlike *Apis cerana* (Asian honey bee) which has evolved with varroa.

Dr Ramsey's research into the feeding habits of varroa will be valuable in finding more targeted and appropriate treatments for varroa infestations of *Apis Mellifera*. You can read Dr Ramsey's article (and see the very cool photo on the front cover of the Proceedings of the National Academy of Sciences of the United States of America) here:

<https://www.pnas.org/content/116/5.cover-expansion>

And for a very good guide on the latest science on treating varroa, Dr Ramsey recommended this guide from Cornell University:

<https://pollinator.cals.cornell.edu/sites/pollinator.cals.cornell.edu/files/shared/IPM%20guide.compressed.pdf>



BAM (Bee Awareness Month)



The WBA has been invited again this year to take part in the WCC BAM events during the month of September. There will be displays at the Botanical Gardens in the Begonia House and in the Tree House Education centre. WCC will also open a stand at the Pop-up library in Manners Street.

The WBA committee is asking for volunteers to attend these events and answer questions from the public about bees and beekeeping. The WBA has participated in these events in 2017 and 2018. Please speak with Eva Durrant or Jane Harding or other committee members or email Jane Harding at Janeh@xtra.co.nz if you can spare a few hours to help inform people about bees, how to protect their environment, and about urban beekeeping.



WBA Anniversary Celebrations

1939 - 2019

The WBA was formed 80 years ago, in October 1939, and the current committee is interested in ideas on how the club could celebrate the occasion.

Please bring your ideas on what you think we could do to mark the occasion and some thoughts on how to celebrate this important date. Be part of the discussion at the Wednesday meeting.





Things to do this month

August checklist

- ✓ Prepare for new season's work
- ✓ Get queen-raising equipment if you are going to rear your own queens
- ✓ Assemble feeding equipment and supplies of sugar
- ✓ Assemble frames for new season and have wax or plastic foundation on hand
- ✓ Cut weeds and high grass around hives



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



QUEEN BREEDING

Photo taken by E Durrant at Camp Rangī in February 2018



Wax dipping day

If you have new boxes requiring dipping please take them to Wayne Wild's place (206 Coast Road, Wainuiomata) on or before the dipping date – cost \$4 cash per box.

If delivering before Saturday 10 August please contact Wayne on 564-4069 to arrange convenient drop-off time and date.

Wayne may be able to dip them while you wait on Saturday depending on numbers. Otherwise you may have to collect the boxes at a later date.

Please label your boxes with your name and phone number on the inside using a permanent marker.

John Burnet has plenty of kitset standard grade boxes available for sale at present – $\frac{3}{4}$ size - \$17 each and full depth - \$22 each.

Bring some acrylic paint and roller/brush if you want to paint your boxes while they're still hot.

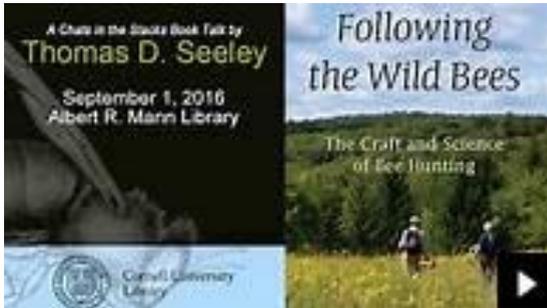
We suggest you use darker paint colours where possible as these retain the sun's heat better and keep the colony warmer in winter than plain white.

Cheap paint (mis-tinted) is often available from paint merchants such as Bunnings, Mitre 10 or Resene Shops.





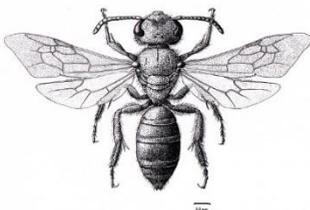
Following the Wild Bees, by Thomas D Seeley



In his new book, *Following the Wild Bees* (Princeton University Press), **biologist Thomas Seeley**, a world authority on honeybees, vividly describes the history and science behind a lost pastime: bee hunting. Once practiced widely but little known today, the

tradition involves capturing and feeding honeybees, then releasing and following them back to their secret residences in hollow trees, old buildings or abandoned hives. Providing both practical tips and new insights into the remarkable behavior of bees living in the wild, Dr. Seeley's book also offers a unique meditation on the pleasures of the natural world. As more people become aware of the essential role that honeybees play in our global agroecosystem, in *Following the Wild Bees* readers will find an excellent guide for learning an old craft and experiencing the rich insights gleaned from close observation of the teeming activity found in our everyday environment outdoors. Thomas Seeley is the Horace White Professor in Biology in the Department of Neurobiology and Behavior at Cornell and the author of three previous books: *Honeybee Ecology* (1985, Princeton), *The Wisdom of the Hive* (1995, Harvard), and *Honeybee Democracy* (2010, Princeton). His most enduring honour, though, is to have had a species of bee named after him: *Neocorynurella seeleyi*

https://www.youtube.com/watch?v=rq3dSWC_zQ8



Neocorynurella seeleyi

Engel MS, Klein BA. 1997.

Neocorynurella, a new genus of Augochlorine bees from South America (Hymenoptera: Halictidae). Deutsche Entom. Zeitschrift.44:155-163



Beekeeping projects for winter

- 1. Repairs and maintenance.** Check each of those supers stacked in the garage or under the car port. Scrape them clean of wax buildup along the edges where the frames sit. Rough up the interior surfaces of brood boxes, using something like rough-grit sandpaper. Honeybees smooth out rough surfaces with propolis which has antimicrobial properties that help keep colonies healthy. If you have cut out old wax from frames, clean up the frames and re-wire. It is a good idea to bag and freeze these frames to kill wax moth eggs laid in hidden places or bored into the timber. Don't add foundation until you are ready to bring the frames back into the hive.
- 2. Check all stored clears.** Did you put the robbed out clears into the freezer for a few days at the end of the honey harvest? If you did, you will have killed the pesky wax moth that can create havoc with stored frames. One way of keeping the frames in good condition till spring is to store them in those large plastic snap boxes. There is a 40 litre size which holds about 12 frames. Or store the frames in boxes stacked so the frames get plenty of light and fresh air to deter the wax moth setting up home. Guard against mice and rats.
- 3. Render your beeswax.** All summer long I toss bits and pieces of beeswax in a bucket. By winter, I usually have enough to render the wax. You can make gifts, household products, or your own starter strips for your spring bees. Or, if you use plastic foundation, you can paint them with a fresh layer of your own beeswax.
- 4. Repair your bee suit.** Mend those tears in the veil of your bee suit. You have time now while the bees are tucked up for a few more weeks. Hard to find time when you see a bee on your veil and you are looking at her back!
- 5. Gadgets and Gizmos.** Refine one of your jigs or ideas that work in your apiary and bring it along to the club to share with others.



Beekeeping projects (cont)

6. **Make a swarm charm.** A Canadian friend has encouraged me to try this. Yes, rendering wax is messy, and if you melt brood combs you will be left with an unsettling byproduct called slumgum. Despite its appearance, slumgum makes a great swarm lure. Simply dip an old rag in melted slumgum and let it harden. In spring, throw a rope over a tree limb near your hives and hang the charm 15-20 feet from the ground. With any luck, an escaping swarm will settle on your charm while scout bees search for a new home. When it does, just untie your rope and lower the swarm into a cardboard box.
7. **Stock up on supplies.** Use the wet days to nail together more honey supers – you know you will need them! It is a wonderful feeling having a stack of boxes and wired frames and a packet of foundation at the ready during the swarm season. When you see the need to split a hive, or find a swarm, there is no need to panic as you are prepared!
8. **Build a pollinator home.** Remember all those hollow-stemmed plants you saved? Now is the time to take your collection of swan plants, chrysanthemum and salvia dry stems, etc, and turn them into tubes for spring pollinators. If you have no stems, just use paper straws. It's a fun project to do with the young ones.

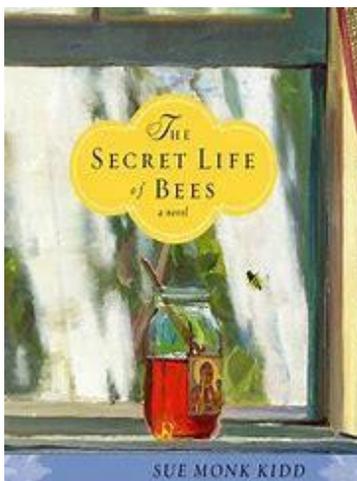




The Secret Life of Bees by Sue Monk Kidd

Book review by Kiwi Rose

This is story not so much about bees but of Lily, a teenager who grew up on a peach farm in South Carolina with her abusive father and the belief that she was responsible for her mother's death when she was aged only four. Set in the 60s when inequality and race segregation was real, it tells that Lily is essentially raised by her black housekeeper, Rosaleen. When racial tensions overflow and Rosaleen is beaten and arrested, Lily and Roseleen go on the run. Fugitives from justice and Lily's harsh, abusive father, they take refuge in the home of three black beekeeping sisters. The story then follows Lily's spiritual journey to understanding the world, the mysteries surrounding her mother, and ultimate forgiveness. The story explores the topics of human spirit, religious beliefs, feminine spirituality and the power of healing and forgiving. It is well written and flows without becoming too introspective. There is little to do with bees here but if you are into a good read on the human power to overcome adversity this a book is for you.





Looking ahead

Upcoming topics at the WBA meetings

September

Beginners Class: Pollen and nectar sources

Main meeting: Learn about our native bees from an expert

October

Beginners: Pests and diseases

Main meeting: Come and listen to an Insect allergy expert

November

Beginners: Finding bees – swarms, splits, etc

Main meeting: Annual Mead competition

December

Social evening. Delicious food from the Food Truck, raffles, quiz, and a bring & buy stall (bring your bee products (not honey) to sell, e.g. beeswax wraps, beeswax balms, etc



Notices

Looking for wax for rendering

Tony Kelly-Smith, principal of St Patrick's Primary School in Kilbirnie is looking for some old bits of honeycomb/wax. Tony has used this in the past to make Kawakawa balm.

“A grandad of one of the students a few years ago bought in a sack of broken honey comb which we refined (took out the insects and wings etc) and combined it with olive oil and kawakawa. The students are having a 'market day' where they present goods for sale that they have made. The profits go to specific things like, sports gear, or designated charities.”

If you have some wax bits and pieces, contact Tony directly at principal@spps.school.nz

Hive site available

David would be interested in having a beehive on his north facing section in Wadestown. Contact **021 715151**.



Interesting websites

Ancient and modern bee coins



www.beeeculture.com/catch-the-buzz-ancient-coins-were-adorned-with-honey-bees-honored-almost-magical/?utm_source=Catch+The+Buzz&utm_campaign=2566a73655-weekly+Catch+The+Buzz+4+29+2015&utm_medium=email&utm_term=0_0272f190ab-2566a73655-332116837

<http://news.coinupdate.com/new-zealand-features-honey-bee-on-worlds-first-silver-hexagonal-coin-with-resin-inclusion/>

Apiculture Monitoring Report 2018

This report was released in May. For direct download click link.
<https://www.mpi.govt.nz/dmsdocument/34329/direct>



Who can I speak to?

President - James Withington 0272 851206 jwithington2016@gmail.com

Vice-President - Tricia Laing 0274 766540 tricialaing48@gmail.com

Treasurer - John Burnet (04) 232 7863 johnburnet@xtra.co.nz

Secretary - Jane Harding (04) 421 2417 janeh@xtra.co.nz

Best times to reach Jane are evenings, and Friday Saturday/Sunday

Committee Members

James Scott - Membership and website (04) 565 0164 james@scott.gen.nz

Judith de Wilde – Librarian (04 235 8173) kiwicavingrose@gmail.com

Barbara Parkinson – supper co-ordinator (04 2379624) parkinson@xtra.co.nz

PK Tan 021 1093388 pk.propserv@gmail.com

Richard Braczek 021 0344311 ibraczek@paradise.net.nz

Leon Sullivan 021 348201 nzgato@gmail.com

Dave Henderson 0274 848165 Davehendersonnz@gmail.com

Newsletter editor

Eva Durrant 027 3118700 edurrant@xtra.co.nz

Meeting location

Johnsonville Community Centre,
Moorefield Rd, Johnsonville

