September 2022 Newsletter

September meeting | 7 September Where | Johnsonville Community Centre Editor | Jane Harding janeh@xtra.co.nz

Topics for the September meeting

Beginners session 6:45pm upstairs:

Join Janine Davie and learn about the spring build-up and preparation for swarming. Janine will also cover looking at a hive, identifying a weak hive and merging hives.

Main Meeting 7:30pm:

This month we will hear from three research students from Victoria University who work with Phil Lester on understanding and treating for varroa mites.

We'll also talk about Bee Awareness Month and answer spring Q&A from members.

Correction from the July newsletter: Gadget and Gizmo session in October, not September.

Apologies, our July newsletter advised the Gadgets and Gizmos session would be in September, however this was an error. The Gadget and Gizmo session will be in October. Bring along your gadgets and good ideas to share with other members.

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From the Editor – Jane Harding

September is spring (supposedly) and the beginning of the swarm season... Janine Davie will be giving a talk on preparing for spring and what to look for at the beginner's session this week.

Varroa continues to be a major pest for most beekeepers and we are lucky to have some researchers in Wellington focussed on this issue. Three of the researchers will join us on Wednesday to talk about their research. See below for a summary of their research areas.

There's been a bit in the media lately about consciousness and insect feelings, and the National Animal Welfare Advisory Committee recently held a seminar on insect sentience (ability to feel). See below for a summary of what the advisory committee thinks on this topic.

We're still looking for a new President, as we didn't elect a replacement for James Withington at the AGM. So, if you're interested in contributing

meaningfully to the future of the club, consider taking on the role of President for a year and help determine the sort of activities the club gets involved in.

James Withington (our Past President) has provided the following summary of what the duties of the president entail.

Duties of the President – James Withington

Monthly meetings:

Historically the president has prepared and presented the monthly meetings, although this does not have to remain status quo. The monthly topics are predetermined during committee meetings. To keep it informative you may want to search for news articles, videos, stories etc to prevent the dreaded death by PowerPoint exercise. It is your role to keep the meetings to order and within a reasonable time period. Normally the president introduces and thanks any guest speakers that have been arranged.

A lot of people have a fear of public speaking, however with time you will find yourself relaxing and becoming accustomed to being in front of everyone

Other duties:

Outside of the meetings you are generally the contact point as you are listed on the clubs page. This means you will receive a variety of phone calls from people wishing to take up beekeeping, the media seeking information for stories, complaints for members of the public about bee issues, or possible swarms, and approaching possible speakers for the club nights. There is also an expectation of writing a small article for the monthly club newsletter. I would estimate that I spend about 10-15 hours a month working on presentations and phone calls a month.

Committee meetings:

You also preside over the committee meetings to map out the upcoming month meeting themes, speakers and possibilities. Having said that, the position is well supported by the committee members, who are happy to be tasked with making the magic happen.

WOAP – Huxley's Bee Happy

John Burnet attended the Wellington on a Plate event organised by Huxleys which showcased honey from the Botanical Garden hives.

John delivered a brief BAM presentation on bees and beekeeping to about 35 diners who then enjoyed a Whistling Sisters mead, Wai Manuka sparkling water (made in Eastbourne) and a honey-focussed lunch.

Lots of intelligent bee questions followed and lots of Urban Trees for Bees brochures distributed. Judging by comments made to me afterwards everyone is far more understanding and appreciative of bees in our neighbourhood and community.

On the menu were:

Buttermilk waffles, roasted wild mushrooms, wagyu pastrami, line caught fish and Jerusalem artichoke gnocchi, all with honey in some form.



Varroa Research

We will be joined this month by three research students from Victoria University Te Herenga Waka who will talk to us about their research into varroa and answer questions.

Tessa Pilkington:

Varroa is the leading cause of mortality of beehives in New Zealand. I've been working on a strain of bees that appear to show a level of mite resistance. Preliminary results indicate that this strain does offer a degree of resistance, and that this resistance may be associated with a slightly shorter developmental time of the juvenile bees. A reduced bee developmental time could limit the number of mite progeny able to be developed from any individual cell, slowing parasite population growth.

My work in future summers will seek to confirm these results.

Rose McGruddy:

Results from last year's COLOSS survey showed Varroa to be the biggest cause of colony loss in NZ. The most effective Varroa control methods currently on the market are synthetic or organic miticides. These treatments can have negative impacts on the environment and non-target species, including the bees. RNA interference (RNAi) has potential as a next-generation control method for pests like Varroa. Our research thus far has found RNAi to be effective in controlling Varroa numbers, providing a species-specific mite management alternative.

Zoe Smeele:

Together, *Varroa destructor* and the Deformed wing virus represent a severe threat to the beekeeping industry globally. Currently, the effects of DWV are mitigated through controlling *V. destructor* levels using miticides, which varroa may be increasingly developing resistance towards. The application of pathogen-specific double-stranded RNA (dsRNA) molecules has been widely proposed as a pesticide treatment. We assessed the effectiveness of using dsRNA to control for DWV by feeding mini-hives of honey bees dsRNA specific to DWV. Results from this experiment aid in determining the effectiveness of dsRNA as a next-generation treatment strategy for pests and pathogens of honey bee colonies.

BAM: Bee Awareness Month

A number of events are happening around Wellington for BAM and a few organisations are looking for a beekeeper to assist:

Rintoul St Villas – community pollinator project – 10^{th} September and 24 October from 10am to 12pm. Looking for a beekeeper to assist with the education component. Rintoul St Villas, 261 Rintoul St, Berhampore.

<u>Johnsonville Shopping Centre</u> – BAM event – 13th September from 10am to 12pm. Looking for a beekeeper to attend.

<u>Home of Compassion</u> – Come and See the Bees – 24 September from12pm-3pm. Looking for a beekeeper to assist with the education component.

If you can help with any of these, please get in touch with Jane Harding janeh@xtra.co.nz.

Bee Sentience

You may have noticed a few articles in the media on insect feelings and insect responses to pain and stimuli lately. Here's a selection of articles and a summary from a recent National Animal Welfare Advisory Committee seminar on insect sentience.

Insect Sentience (Nita Harding)

The National Animal Welfare Advisory Committee (NAWAC) understands animal sentience to mean that animals have emotions, feelings, perceptions, and experiences that matter to them. These can be negative (such as pain or boredom) as well as positive (such as pleasure or comfort).

NAWAC recently held a seminar where the topic of insect sentience was discussed. It would be fair to say the jury is still out on this. However, many insects, and especially those that are well studied, such as the colony forming insects (bees, ants and wasps) can learn, display aversion to sensations such as heat and noxious gases and have complex social behaviours. Research in this area is ongoing to both help with management of the beneficial insects, and to deal with situations where certain insects are a serious pest.

Even without being sure whether bees are sentient, a 'compassionate care' approach to their management seems justified. This includes catering for the basic needs of the bees, giving them what they need for optimal health, ensuring they are comfortable, using handling practices that minimise aversive responses from the bees and ensuring the wider environment is suitable.

The New Zealand Honeybee Care Code gives guidance for practices for bee care that will ensure the physical, health and behavioural needs of bees are met for all aspects of beekeeping.

Link to the NZ Honeybee Care Code:

https://apinz.org.nz/wp-content/uploads/2017/02/ApiNZ-Beekeeper-Code-of-Conduct.pdf

Do spiders sleep?

https://www.pnas.org/doi/10.1073/pnas.2205821119

Do invertebrates have emotions?

https://www.the-scientist.com/news-opinion/do-invertebrates-have-emotions-70067

Bees can feel pain

https://sentientmedia.org/bees-can-feel-pain/

And on the subject of bees and pain, international research is being undertaken on the most humane way to destroy bee colonies when they need to be euthanised. Following is the abstract from a recent article:

Honey bees are most often kept for production purposes. Sanitary, regulatory, or zootechnical circumstances may lead the beekeeper or the veterinarian to dispose of a honey-bee colony. Unfortunately and at present, no standard method of euthanasia exists, leaving the door open to many more or less acceptable practices. Based on a short survey of current practices in 8 countries, we list and rank these methods. Although imperfect, the sulfur dioxide technique appears to be the most efficient. We suggest that it should become the reference method to be taught and incorporated into veterinary and regulatory guidelines.

- Christophe Roy, Nicolas Vidal-Naquet

Hive Rental/Management Opportunity

An Auckland-based hive hosting company is looking for an experienced Wellington beekeeper to take over responsibility for its Wellington area clients.

Key details are:

- Ideally suit a part timer or retired person as approx. 20 -40 hours per month hive management and travel time required depending on season.
- Hired hive numbers vary from 12 15 depending on season all are one hive per site
- Hives are spread from Churton Park and Silverstream in the north to Owhiro Bay and Lyall Bay in the south.
- Host company invoices all clients direct amounts vary depending on clients' preferred honey plan
- You are paid by the host company \$100 per hive per month less a host company management fee (\$140 per month)
- All hive-ware, colonies and equipment are owned and provided by you
- All beekeeping costs i.e. hive levies, varroa treatment, vehicle, fuel etc are your care
- You are responsible for honey extraction and returning packaged honey to client according to their plan
- Clients often use this hire arrangement to learn about beekeeping and maybe obtain hives of their own
- If they do elect to become a beekeeper they are encouraged to join the club and complete the club's own beginners course
- For more details contact the Club Treasurer John Burnet 0274-379-062

Apiculture Data Survey

WBA has been approached by a Masters Student from EIT in Hastings who would like to survey beekeepers about their data management for her Masters thesis. We'll be sending out a link to her survey shortly, and you will also be able to fill in the survey at the October meeting.

Gadgets and Gizmos – October meeting

October meeting is going to be our Gadgets and Gizmos Evening, in memory of the late Andrew Beach who was a master of making practical and useful things to make beekeeping easier. If you've got a clever idea, or just a new way of doing something that you think is easier than what you were doing before, bring it along to the October meeting and share with the group. There is a prize for the best gadget!

Next Meeting

The October meeting will be held on 5 October and we will have a beginners session before the main meeting.

Topics for October are:

Beginners Session – Varroa Treatments, Hive health, swarm control – James

Main meeting – Gadgets and Gizmos competition. Queen breeding and rearing (hopefully a guest speaker on this topic) - James W

Meeting Location

Johnsonville Community Centre Moorefield Road, Johnsonville



Who can I speak to?

President and Vice President – positions vacant

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

Secretary – Jane Harding 027 421 2417 janeh@xtra.co.nz

Committee Members

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

Web Master - Jason Bragg - (021 527 244) email@jasonbragg.me,

Librarian - Ellen Millar - (021 709 793) msoon.email@gmail.com

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

Swarm WhatsApp Administrator - Jim Hepburn (021 926823) jilld@gmail.com

PK Tan - 021 109 3388 pk.propserv@gmail.com

Graeme Chisnall - 021-246-8662 canzel@gmx.com Janine Davie - j.davie@orcon.net.nz

Viv Harris - (027 448 9991) vivharris@xtra.co.nz

lan Svela - (027 270 6842) thors.son1956@gmail.com,

Newsletter Editors - Eva Durrant - 027 311 8700 edurrant@xtra.co.nz

Jane Harding - 027 421 2417 janeh@xtra.co.nz