Wellington Beekeepers Association
Support and encouragment of beekeeping and beekeepers
May 2023 Newsletter

Next meeting | Wednesday 3rd April 2023
Where | Johnsonville Community Centre
Editor| Jane Harding janeh@xtra.co.nz

Beginners Class: 6.45pm

Apparatus, Materials, Building and Repair of Hiveware – **Graeme Chisnall**

Main Meeting: 7.30pm

Tricia Lang and Martin Toland - Bee-centered beekeeping: comparing Top-Bar and Langstroth hives. Martin will also talk about the pros and cons of Carr hives.

See below in the newsletter for an explanation of these different sorts of hives.

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From the President - Tricia Laing

I am very happy to report that a team building a new fence for my neighbour, within a kilometre of my apiary, found three large wasp nests and dealt to them. Now my hives are not being targeted by wasps any more. When I went to put in the varroa treatment I found that all four of my hives (three golden mean top bar hives and a langstroth) had implemented a brood break which will help to reduce the number of varroa too. I hope everyone has had the chance to treat their bees for varroa. The rate of colony loss over the winter is influenced by whether we treat for varroa in autumn or not.

The results of the 2022 *NZ Colony Loss Survey* are out and to view the full survey results go to www.landcareresearch.co.nz/bee-health . Wellington Region's report of colony loss (14%) is similar to the Upper South Island (14.5%), less than the Lower South Island (15.5%) and more than the the Middle South Island (11.5%) and Middle North Island (12.5%). This result suggests that the weather has an environmental influence on colony loss over the winter. The four main causes of colony loss with the hive were suspected varroa (up 20% from 2022), queen problems (down 6% from 2022), loss from wasps and suspected starvation which remained similar to previous years. The report found that most beekeepers remain cautiosuly optimistic about the future of beekeeping in New Zealand.

The latest *New Zealand Beekeeper* (2023m Volume 31:2) included photos of beehives washed up against fence lines and under trees after cyclone Gabrielle which I found pretty distressing. Two lessons from the beekeepers' experiences of dealing with the aftermath of Cyclone Gabrielle were identified, namely:

1. Previous benchmarks about where it is safe to locate beehives no longer apply and we need to think twice before locating beehives

near rivers or on sites prone to erosion or flooding (Foster April/May 2023 pages 6-7): and,

2. Connections with other beekeepers matter (Tairawhiti Beekeepers' Hub April/May 2023 page 54).

And congratulations to Ben Scott from Upper Hutt on winning the Liquid Honey section in the honey competition. Ben takes home the Bodmin Cup for the best honey.

Hives hit by Cyclone Gabrielle, Gisborne. Photo credit: Yasuo Nozue

Hive Types

Langstroth/Top Bar/Bench Hives/Carr/Warre, it can be all rather confusing. Here's a quick overview of the common different hive types.

Langstroth – the most common hive type in New Zealand and also around the world. The Langstroth hive is named after it's creator, L.L. Langstroth, who created the hive in 1852. This hive is the first to utilize bee space, which is the precise measurement that bees will avoid either building comb in or filling it with propolis. Langstroth beehives are comprised of stacked boxes with vertical hanging frames. This hive comes with either 8 or 10 frames. The bees build comb on the frames and the beekeeper can easily remove the frame from the beehive.

Langstroth hives are expandable because more boxes can be added to the top of the hive as the bee colony grows. There are 3 sizes of boxes used in a Langstroth hive – shallow, medium, and deep. Deep boxes are usually used for brood, while medium and shallow are used for honey supers.

Top Bar hives are horizontal, in comparison to the tall, vertical Langstroth hive. Instead of multiple boxes stacked on top of each other, top bar hives have one long box.

Inside the box are 24 wooden bars. The bees build their comb hanging down from these bars. Each of the bars has a "starter strip" from which bees will start building comb, again hanging vertically. Top bar hives use no foundation, so it's an ideal type of beehive for beekeepers who prefer natural beekeeping. Benefits of the top bar hive is that it is at a comfortable waist height, which makes inspections easier. Top bar hives also don't require any heavy lifting since there are no stacked boxes.

Bench or Horizontal Hive. The Horizontal hive functions similarly to the Langstroth hive, but with the benefit of no heavy lifting. While the

Langstroth hives boxes are stacked upon each other, the Horizontal hive has everything on one level.

The frames used in the Horizontal hive are the same as regular Langstroth hives. Therefore, you can choose to use foundation or go foundationless.

Horizontal hives have a lid that opens up like a treasure box, and some models even have observation windows. It's a really great hive that has the functionality of a Langstroth hive, but with no heavy lifting.

Carr Hive. The WBC or Carr hive, invented by and named after William Broughton Carr, is a double-walled hive with an external housing that splays out towards the bottom of each frame covering a standard box shape hive inside. The WBC is in many respects the 'classic' hive as represented in pictures and paintings.

Warre Hive. Warre hives look very similar to Langstroth hives, but they are a little smaller. They use vertical stacking boxes just like the Langstroth hive. French monk Abbé Émile Warré created the hive in hopes of simulating the hollow of a tree.

The Warre hive differs from the Langstroth hive in that it does not use frames. Instead, Warre hives use bars like Top bar hives. No foundation is used in a Warre hive.

With the Langstroth hive, new boxes are stacked on top, but for the Warre hive, new boxes are put on the bottom. The top of the Warre hive has a quilt box. It contains material that absorbs any condensation that the hive may generate.

Warre Hives are not common in New Zealand.

Update on Mark Goodwin's Research proposal

As you will have seen from the email last month, Mark Goodwin and Jane Lorimer are very pleased to have the club involved with their research on the floral makeup of our NZ honey. They are still refining the project parameters, based on the results of the pilot they ran in 2020. The project will likely involve beekeepers being asked to collect bees from specific nectar sources, which will changed from time to time. Beekeepers who register to be involved will be sent collection instructions and bags. Jane and Mark hope to get the project underway in Spring 2023, so expect more information on this in the coming months.

Jane Lorimer - Project Lead 027 294 6559

ApiNZ Conference 2023

pī·ā·ora BEES GIVING LIFE | APICULTURE NEW ZEALAND

The Apiculture New Zealand's Conference and Trade Exhibition to be held in Rotorua from 29-30 June aims to provide a space to connect with others in the industry and be inspired by the latest science, research and innovation.

This year's conference welcomes two international experts on social insects. Leading international researchers, Dr David Tarpy (USA) and Dr Peter Neumann (Switzerland), will share their passion and expertise with New Zealand beekeepers. Dr David Tarpy is a professor of Applied Ecology and the North Carolina Extension Specialist in honey bees. Among other initiatives, his programme runs the Queen and Disease Clinic and the Beekeeper Education and Engagement System (BEES).

Dr Peter Neumann is the Vinetum professor at the Institute of Bee Health, University of Bern. His research and teaching cover all aspects of bee health with a focus on behavioural, evolutionary and molecular ecology of honey bees and their pathogens. He is also the president of COLOSS, an international research association focused on improving the wellbeing of bees: www.coloss.org.

In addition to a great lineup of speakers, panels and seminars, the Conference's Trade Exhibition provides a wide range of booths with all the products and information a beekeeping business needs, from the latest in hiveware and machinery to professional development opportunities and pest control. conference programme can be found here and will be updated regularly.

Registration is open now.

Preparing your hives for Winter

Following on from Frank's article last month, here's a few pointers from one of the industry players – Ecrotek.

Preparing your hives for cold weather

Much like us, bees prefer to spend winter snuggling up for warmth, staying indoors, and eating as much as they can. But they can't do that without adequate food, a warm hive, and protection from the elements.

That's where you come in. Although beekeepers don't need to do as much during the winter, it's important to prepare your bees well ahead of time, so they'll be able to cope with the colder weather. That means checking and prepping hives, feeding extra honey or sugar if needed, and treating for disease.

The more you prepare, the less you'll need to intervene during winter itself. It is possible to open hives to feed or treat for disease during cold or wet weather, but it's definitely not the best option for you or your bees.

Here's our winter readiness guide:

Inspect and assess

Beekeeping is all about being observant and taking notes, and winter is no different. Mid-autumn is a good time to assess your hives and make notes about each one. How much honey do

they have? Is the population thriving or flagging? What does the brood pattern look like? Any signs of disease? Any damage to the hive itself?

These notes will be the basis of your winter prep plan. The more thorough you are in checking and recording the state of your hives, the better prepared you'll be.

Combine, reduce, rearrange

Once you've assessed your hives, you're ready to make changes. Rearrange each hive so brood frames are clustered together, with honey frames at either end. Remove any queen excluders so the bees can move around freely.

Remove empty frames and boxes to reduce the size of the hive in general, and reduce the number of entrances – smaller hives with fewer entrances are easier to keep warm and defend against invaders. This is also a good time to cut back vegetation around the hives to prevent insects and other invaders getting in.

If you have a small, weak colony, consider combining it with a larger, stronger one before winter to increase its chance of survival.

Food supplies and disease prevention

Your colony won't survive the winter if it doesn't have enough honey. Check each hive for honey frames to make sure it has adequate supplies. General guidelines for New Zealand say that a hive in the Auckland area will need around six full frames of honey for winter, while those in colder climates may need more.

If a hive doesn't have enough honey, you need to bring in reserved honey or supplement with sugar water to tide them over. But don't feed with pollen at this stage – this could lead to an early increase in population, which will then require more supplemental feeding.

This is also the time to test for diseases such as Varroa mites, and treat if needed. The colony will be weaker and more vulnerable over winter, so it's best to treat early.

Keeping your bees cosy

During winter, your hives will need to protect your bees from the elements. Depending on your location, this could mean extreme cold, high winds, or torrential rain and dampness.

If you're in a cold climate, an inner cover or insulation board can help keep the colony warm. In windy areas, or if your hives are in a particularly windy spot, you can secure lids with weights, shield ventilation holes with boards, and even create a windbreak with hay bales or vegetation. In rainy, damp areas, you can add a rain cover to prevent water from entering the hive.

Wherever you are and whatever the climate, ventilation is essential. Ventilation holes or a slotted bottom board allow air to circulate, preventing dampness, mildew, and the build up of pathogens. Of course, they will also allow some heat to escape, but this is balanced out by the benefits.

Keep up the checks

After the hard work of preparing for winter, it's tempting to just let your bees be until spring. But it's important to keep checking throughout the cold season. This is particularly true at the end

of winter and beginning of spring – bees are most likely to run out of honey and starve at this stage.

Do a hive check once a month over winter, preferably on a warm, sunny day. You don't want to open the hive and expose the colony for long, but you can do a quick check of food supplies, brush debris or dead bees from entrances, and assess general hive health. If you live near your hives and you're worried about losses you could always check your hives without opening them – watch for flight paths, check pollen being brought in, and top up feeders if needed. As spring approaches, you can watch for activity and supplement with pollen if needed.

When your hives are rearranged, fed, and weatherproofed, your bees will have the best chance at surviving the winter. And – like them – you'll probably be ready to snuggle up and rest as well.

Credit - Ecrotek

Public Lecture on 5 May

The U3A (University of the 3rd Age) is holding a public lecture at the Embassy Theatre on 5 May. Phil Lester will be talking about bees (of course) and the title of his presentation is " Bees: Playful, diverse, intelligent and smarter than you think"

The lecture is from 10.30 to 12.00pm and is free for U3A members. No-members may attend as guests of a member and pay $5.00.

And for a slightly different take on bees "playing", there's an interesting article in the January 11 2023 New Scientist that suggests we shouldn't apply "human" behaviours like playing to other species, as this limits our ability to analyse and study those behaviours and see them for something else.

Here's the link to the article, but you'll need to be a subscriber, or look for it in the library: https://www.newscientist.com/article/mg25734210-900-why-we-shouldnt-attribute-human-motivations-to-animals-like-bees/

June meeting

Our newbies session in June will be all about the legal and regulatory requirements for keeping hives, which John Burnet will be taking.

And at the main meeting, Viv Harris will give us a talk on Beeswax and its properties and demonstrate how to make a very useful bee balm. It's a little while since we've had Viv's talk, and even if you have seen it before, it is a very interesting and informative talk.

Who can I speak to?

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