

# BEELINES

NEWSLETTER OF THE BEEKEEPERS CLUB INC

## OCTOBER 2018



*Prahran swarm, 2018*

## Swarm Data Collection

Swarm season 2018 is in full swing. Please remember that the Apiary Code of Practice requires you to manage colonies to prevent or minimise swarming. Have spare equipment on hand to give your bees room, to perform an artificial swarm and to hive swarms.

The club is again looking to collect information about swarms to assist members understanding of when swarming starts and stops in a given area and season.

If you have collected a swarm, please go to the club web site, Members-Only menu and click SWARM DATA COLLECTION to record it.

Upcoming Events (see website for full details and registration)

### Club Monthly Meeting

18<sup>th</sup> October 2018, 7:00 PM

Doncaster Secondary College,  
123 Church Rd, Doncaster 3108

**Victorian Bee Biosecurity Officer** (DEDJTR) Jessica Millar will be presenting followed by:

**Trade Night**, including stalls by:

Bec McBride Beekeeping, John Edmonds and Kelvin Trading.

### Club Apiary BBQ and Hive Inspection

Noon, Saturday 27<sup>th</sup> Oct 2018

A sausage sizzle followed by a routine hive inspection will be held at the club apiary for any new or interested members. Bee suits and gloves will be available to borrow.

Please register (free) on the web site to help with catering.

Note: You need to be logged in to see the event.

### Nuc Nanny Course

13-27<sup>th</sup> Oct 2018. Fully booked.

### Bee Biosecurity Masterclass—Varroa mite

11:00 AM Tuesday 30<sup>th</sup> October

See inside for details.

### Queen Rearing Course

3-4<sup>th</sup> Nov 2018. 4 places currently available.

## VAA 39th Annual Beekeeping Field Day 2018

The Bendigo Branch of the Victorian Apiarists Association is holding its annual beekeeping field day on Sunday 14th October 2018.

9.30 a.m.-3.00 p.m.  
Harcourt Leisure Centre  
Bingham's Road, Harcourt

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|---|---|--|---|---|
| COME, MEET, MINGLE, SHARE IDEAS   | VIEW <a href="http://facebook.com/bendigobeekeepers/">http://facebook.com/bendigobeekeepers/</a>  | INFO. FOR ASPIRING & EXPERIENCED APIARISTS | FELLOWSHIP — MENTORING — DISCUSSIONS                                | GATE ENTRY: ADULTS \$10 CONC'N \$7 CHN. FREE  |
| FOUNDATION PLASTIC & WAX  | BEE EQUIPMENT & MATERIALS   | FLOW-HIVES - CLASSIC & FLOW HIVE 2         | TIN LINERS FOR BEE BOX LIDS   |   |
| BREAKFAST BACON & EGG ROLL TEA & COFFEE From 9.30 a.m.  | HONEY EXTRACTORS  | MANUKA PLANTS                              | CONSTRUCTION EQUIPMENT  | BEE SWAX CANDLES, FOOD WRAPS, JEWELLERY   |
| STEAM BOILERS   | <b>39TH ANNUAL FIELD DAY PROGRAM</b><br><b>SUNDAY 14TH OCTOBER 9.30 a.m.-3.30 p.m.</b><br><b>HARCOURT LEISURE CENTRE 63 Bingham's Rd</b><br><i>Ongoing Activities running throughout the day</i><br>Honey Extraction Demonstrations, Trade Stalls, Honey Sales<br>Beginner's Area, Men's Health, Food available, DELWP Officers on site, Queen Bee sales -To order Ph: Max 03 5446 7911<br>9.45 a.m. Announcements/Welcome - President, Rob Gardner<br>10.00 a.m. Indoor Presentation - Tree Recognition - Bob McDonald<br>10.30 a.m. Roving Microphone & Introduction of Traders Norm Andrews.<br>11.00 a.m. Practical Hive Demonstrations<br>Site 1, Site 2 and Site 3 - Open Hive Demonstrations<br>12.00 noon Official Opening— Peter McDonald A.H.B.I.C. Chairperson—On Veranda<br>12.30 Indoor Presentation—Almond Pollination—Trevor Monson<br>12.45 p.m. Auction N.B. Biosecurity Sale Conditions read out by Auctioneer<br>1.30 p.m. Men's Health—Peter Strange (See Details in Field Day Program)<br>1.45 p.m. Lucky Gate Prize Draw—Please put tickets in box provided<br>2.15 p.m. Practical Hive Demos (Similar to 11.00 a.m. to 12.00 noon)<br>2.30 Presentation - View Flow Hive Box (outdoor, then go indoors)<br>2.45 Indoor Presentation—Flow Hive - Honey Extraction -C Dawson<br>3.30 p.m. Close—Travel Home Safely<br><b>PREPARATION FOR TAKING QUEEN BEES HOME</b><br>Transport in an Insulated container<br>(A small 'six-pack' size styro-foam esky is ideal).<br>Ambulance Officers are in attendance -near Hall |  |   | D.E.D.J.T.R. OFFICERS AVAILABLE   |
| ITEMS for AUCTION WELCOMED PH: 0419 337 276 Bill  |   |  |   | LUNCH From 11.00 a.m. Catering for lge. variety tastes  |
| BEE SWAX POLISH AND SOAP. HONEY SALES   |   |  |   | OPEN HIVE DEMO'S B.Y.O. Protective Gear -hat, veil, gloves etc. or buy here.                                  |
| SPECIALISED MACHINERY   |   |  |   | VARIOUS TRUCKS & LOADERS  |
| AUCTION GOODS WANTED Clear out sheds. 10% sales to Club.  | WOOD & PLASTIC FRAMES   | VARIETY OF LOADERS                         | LIP, FACE, SKIN, BABY BALMS   | PROTECTIVE CLOTHING   |
| HELP NEEDED? ASK BENDIGO BRANCH MEMBERS—WEARING YELLOW FLURO VESTS  | HOBBYIST OR BEGINNERS CORNER  | MEN'S HEALTH INFORMATION                   | MATED QUEEN BEES P.O.A. PH:Max 03 5446 7911 Collect & Pay Field Day |   |
| CONTACT PRESIDENT ROB G <a href="mailto:nwigardner@outlook.com">nwigardner@outlook.com</a> PH: 0477 489 889 | LUCKY GATE BEEKEEPING PRIZES Drawn at 12.30 p.m.  | WE WELCOME TRADE INDUSTRY STALLS P.O.A.    | INFO. RE FLOW HIVE & TRADITIONAL HIVES.                             | CONTACT SECRETARY CAROL <a href="mailto:maunderjmcv@bigpond.com">maunderjmcv@bigpond.com</a> PH: 03 5446 7911 |

## The Beekeepers Club Inc – War on Waste

In effort to help reduce waste, we are looking at how we as a club can minimise its environmental impact.

As beekeepers who care for bees & therefore our environment it would be fantastic to set an example for other clubs.

One of the areas for consideration is disposable cups. More than 1 billion disposable cups are used by Australians each year, approximately 92% go to landfill. According to [businessrecycling.com.au](http://businessrecycling.com.au), that equates to 2.7 million coffee cups per day.

We invite you to bring your re-usable cup to the next club meeting. Every little bit helps!



## Welcome Club Newbees

We extend a warm welcome to the following members who have recently joined the club:

- |                     |                  |
|---------------------|------------------|
| Shane & Jan O'Brien | Warrandyte South |
| Andrew Robinson     | Box Hill South   |
| Rosanne Jessop      | Templestowe      |
| Alec Konynenburg    | Templestowe      |
| Martin Doddrell     | Templestowe      |
| Josh Philip         | Macleod          |
| Sandra Robotis      | Donvale          |

## Library Books

A reminder for anyone with outstanding books from the club library to please return them at the next meeting to avoid being chased up and fined. They are a valuable resource to share and we want all members to benefit from them.



## Honey Bee Nutrition

**John Treloar**

When it comes to feeding bees, most people think of sugar syrup. While carbohydrate supplies energy, it is pollen that provides the proteins (amino acids), minerals, fats/lipids (fatty acids) and vitamins that bees need for normal growth and development.

A bee can carry about 100-120 mg of pollen in its pollen baskets (*Corbicula*), about half their body weight. One colony can eat as much as 20-30 kg pollen a year! Nectar flows or feeding syrup encourage greater levels of pollen collecting.

Stored pollen undergoes lactic acid fermentation in the hive which breaks down the hard pollen grain exterior and converts it to bee bread. Nurse bees feed this pollen to young larvae in the form of worker or royal jelly.

The quality of pollen varies considerably. Pollens with a crude protein (CP) level around 25% or greater are considered high quality pollens while those with less than 20% are poor quality. Flat weed has the lowest level (9% CP) and Peterson's curse the highest (37% CP) with the average in Australia being around 26% CP.



Paterson's curse was the most valuable plant to commercial beekeepers which is why it was also known as Salvation Jane. Unfortunately for beekeepers the biological control of this plant in the 1990's was very successful and the fields of purple are no longer seen.

Many hobby beekeepers have their hives in

the suburbs with a plentiful and rich variety of pollen as seen by the range of pollen colours coming into the hive. This overcomes any nutritional imbalance in any single pollen. The amino acid isoleucine, for example, is commonly deficient in Australian eucalypts.



Fats are important for insects' cellular membranes and for the production pheromones. Their level in pollen varies widely (0 - 11%) with flat weed having the highest level. The vitamin content of pollen has not been well researched but we do know that many insects require vitamin B complex. It is likely that bees produce some vitamins through their gut bacteria. Many vitamins are unstable resulting in old pollen (over 12 months) having reduced food value.

Most hobby beekeepers don't have to feed pollen supplements but often have the opposite problem of too many pollen filled frames in the bottom box. However once you have over 20 hives in one area you may need to supplement pollen. There are plenty of recipes for pollen patties (usually containing soy flour) which can be placed on the top bars of the brood nest. Commercial products such as "Bee Build" are also available. Small amounts should be used so as to not attract and feed small hive beetle.

Dry pollen or pollen substitute can be fed in bulk in the apiary during a dearth. Use caution feeding actual pollen as it may contain American Foulbrood or Chalkbrood spores.

A useful resource "Fat bees skinny bees - manual on honey bee nutrition for beekeepers" produced by Rural Industries Research and Development Corporation (RIRDC) can be downloaded from

<http://www.agrifutures.com.au/publications/fat-bees-skinny-bees-a-manual-on-honey-bee-nutrition-for-beekeepers/>

## Bee Biosecurity Masterclass – Focus on Varroa Mite

Box Hill Institute's Biosecurity Centre of Excellence is running a 1hr Bee Biosecurity Masterclass at its Lilydale campus (streamed live).

Jessica Millar and Joe Riordan will be speaking and answering your questions about the recent Varroa mite detection in the Port of Melbourne and other biosecurity challenges facing Victorian bee keepers.

**Time/date:** 11:00am, Tuesday 30 October 2018

**Location:** BHI Lilydale Lakeside Campus, Jarlo Drive, Lilydale. 3140 [map](#)

**Cost:** Free

**Registration:** [Eventbrite ticketing](#)

Speakers:

- **Jessica Millar**, Victorian Bee Biosecurity Officer. Dept. Economic Development, Jobs, Transport & Resources
- **Joe Riordan**, Senior Apiary Inspector. Dept. Economic Development, Jobs, Transport & Resources

Online streaming

- The Event will be streamed online for people unable to attend. Please email [m.blake@boxhill.edu.au](mailto:m.blake@boxhill.edu.au) for a URL link to the streaming service.



## Club Hive Opening

The Club apiary continues to prove a very valuable training and educational resource. Another well attended and successful hive opening was held on September 22nd with several registrants from the September Beginner Beekeeping course attending, having not been able to go into the hives on the day due to poor weather.



## In the Hive

**John Treloar**

Lovely honey odours in the apiary are an indication of the spring nectar flow. Bee numbers should now be building up quickly in the hive.

Once bees cover 80% of the combs (6 of 8 frames) in the top box you need to add another box. "Pyramid up" two frames of capped brood into the added box to encourage the bees up.

Push the remaining frames of brood together and add frames of foundation or drawn comb around them, leaving the honey/pollen frames on the outside of the brood nest.



## Finding the Queen

**Andrew Wootton, EAS Certified Master Beekeeper**

### Introduction

There's a knack to it and rest assured you get better with practice. Remember it is not always necessary to find the queen. Just seeing eggs will tell you she has been there in the last 3 days. But when you do find a queen, mark her\*. That way it's much easier on those occasions when you simply must find her (eg when you need to perform an artificial swarm because you've just found queen cells or when you want to requeen). But don't despair, I've included strategies for when you can't find her.



### Procedure

Concentrate on this task only and do not allow yourself to be distracted by other observations or objectives. This is not the time to be pointing out interesting things to onlookers.

Use minimal smoke to avoid sending the queen into hiding. But do use a little, as you want to keep the bees calm. I like to give a

decent puff into the entrance and then wait a full minute before removing the lid. I separate each box onto an individual lid or floor so the queen can't slip between boxes as I search. The queen will almost always have moved up the hive and be in the highest box with brood in it.

Search the most likely places (in the brood area, on frames of eggs and open larvae). She is unlikely to be on a frame of capped brood and extremely unlikely to be on a frame of honey.

Scan frames in a systematic pattern, round the edges and then across the centre. Look for different colour, shape and movement and don't focus on individual bees. Move through the frames promptly, you should only spend a few seconds on each side. Look first at the side of the frame that was "inward" as queens are photophobic and usually move away from the light.

A good tip is to move the brood chamber a couple of metres away from the hive stand. This reduces the number of bees on the combs as the flying bees return there.

Transferring the frames to another empty box as you inspect, allows you to check the hive walls.

Go through the frames twice and then give up and try again another day.

### Additional strategies

If you are desperate you can shake the bees through a queen excluder. It's best if you attach the excluder to an empty deep and run a strip of duct tape around the inside rim of the box to discourage the bees from crawling up and out. Place this over another empty box and shake all the bees in. Use smoke to drive them down. Slip the empty frames into the lower box as you shake them off, so that the bees are encouraged to move down. The queen will be left stranded and running around the inside corners. It's very disruptive and should be a last resort. It usually works.

If you have several days to prepare for the queen finding exercise, then putting queen

excluders between the boxes allows you to narrow down the search to the box with eggs. After 3 days, the eggs in the other boxes will have hatched

Another way to narrow down which box to search is to move the boxes away from the hive stand, separate them, cover with a cloth and just wait for 15-20 minutes. You should be able to tell which box is queenright, it will be the one that isn't roaring.

### **On not finding the queen**

We all struggle sometimes. Some great advice was offered by *physicsdude* in a Beesource forum, which is to avoid being in a situation in which you absolutely must find a queen in a big hive on a given day. With a little preparation you can sidestep this, before requeening or making up nucs.

#### *Requeening without finding the queen*

To introduce a new queen you have to remove the old queen, otherwise you have no chance of success. By making up a queenless nuc to start the new queen in, you remove the pressure. Place an empty brood box on the lid next to the hive. Inspect the brood nest to find several frames with open larvae. Shake all the bees from these back into the hive and place these frames in the new box. Fill the empty space in the hive with other combs and position a queen excluder on top before placing the new box above. Replace the lid and wait. Nurse bees will move up to care for the brood. Later (an hour or more) you can remove the top box and use the frames with their accompanying nurse bees to make your nuc. Add the new queen and once she is accepted and laying, you can set about recombining. First, and at your leisure, find the old queen in the original hive and remove her. Then use a newspaper combine to unite the frames from the nuc and new queen with the



old queenless hive. This way if you can't find the queen in the old hive on a given day it's not a drama. The new queen is laying and happy. Come back the next day or the day after and try again.

#### *Making up nucs*

A comparable situation is if you want to make up nucs and are trying to avoid taking out the queen. A week ahead, put frames with young brood above a queen excluder and when you come back, you have brood and bees ready to move into your nuc.

### **Artificial swarm without finding the queen**

Finally, when queen cells are found and you need to perform an artificial swarm but can't find the queen, you can follow a similar approach. Move the parent hive aside and place a new brood box on the original site. Place one comb of brood (check to ensure no queen cells) in it and fill the remaining space with drawn comb or foundation. Brush (don't shake, there are delicate queen cells present) all the bees from the old brood box into the new one. Put a queen excluder on, any supers and the bees they contain and then the cleared brood box and combs (replacing the missing comb) and set the roof. Next morning, place a new floor to one side of the hive and remove the upper brood box before adding a new roof. Overnight, the bees will have re-arranged themselves. The queen will be below the excluder in the new brood box on the original site. The nurse bees will have climbed up through the supers to tend the brood. When you separate them, you will have completed the first stage of the artificial swarm, without needing to find the queen. The foragers will return to the original site with the queen.

### **\*Queen Marking**

You can use a "crown of thorns" cage or a plunger-type marking cage to hold the queen while you mark. Or you can catch her by the wings and hold her by the thorax. This takes practice and you should use drones for this. I recommend watching the Mike Palmer YouTube video called "Queens have handles".

Use a Posca marker pen (acrylic water based pigment). The 1.3 mm size is best. Shake well before uncapping. Prime the nib by depressing the tip. Then make sure you test the ink flow by marking your thumbnail or a hive lid. Whatever you do you don't want to cover the queen in a great blotch of wet ink (don't ask how I know). The international colour codes are shown in the table, together with the mnemonic to remember them. In the Southern Hemisphere, the season changeover is half way through the year, so I switch colours 6 months early.

| <b>Be</b> | <b>Warned</b> | <b>You</b> | <b>Require</b> | <b>Gloves</b> |
|-----------|---------------|------------|----------------|---------------|
| Blue      | White         | Yellow     | Red            | Green         |
| 0         | 1             | 2          | 3              | 4             |
| 5         | 6             | 7          | 8              | 9             |

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