

# BEE LINES



Newsletter of The Beekeepers Club Inc. Est. 1998

Enhancing the learning and better practices of the art of beekeeping within our community

**May 2017**



**Next Club Meeting: Thursday 18<sup>th</sup> May, 7 pm**

Venue: Performing Arts Centre (PAC)  
Doncaster Secondary College  
123 Church Rd Doncaster  
Melway 33 G 12

\*\*\*\*\* Guests and Visitors Welcome \*\*\*\*\*

Enquiries and information: [editor@beekeepers.org.au](mailto:editor@beekeepers.org.au)

# Next meeting:

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## Thursday 18<sup>th</sup> May 2017

\* \* Bring honey competition entries to this meeting \* \*

7.00 pm for 7.30 pm start      PAC    Doncaster Secondary College.

Information Corner: Winter Feeding - Andrew Wootton.

Q & A panel

Guest presentation: Insect Photography - Nick Monaghan

## Upcoming events:

<b>MAY</b>	<b>Saturday 20<sup>th</sup></b>	<b>Junior's meeting</b> 10.00 am, Saxon Street.
<b>JUNE</b>	<b>Thursday 15<sup>th</sup></b>	<b>Monthly Meeting</b> 7.00 pm Information Corner. Q&A panel Annual honey competition and tasting
<b>JULY</b>	<b>Thursday 20<sup>th</sup></b>	<b>Monthly Meeting</b> 7.00 pm Information corner Presentation AGM
<b>JULY</b>	<b>Saturday 22<sup>nd</sup></b>	<b>Field trip to Whirrakee Woodware Maryborough</b> BBQ lunch and Visit to Ken Gell commercial beekeeper Depart Doncaster 8.00 am. Return 5.00 pm
<b>JULY</b>	<b>Saturday 29<sup>th</sup></b>	<b>Winter Workshop: Improving your beekeeping</b> 9.30 am – 4.00 pm, Siteworks 33 Saxon St Brunswick
<b>SEP</b>	<b>Wednesday 6<sup>th</sup></b>	<b>Beginners Course "Fundamentals of Beekeeping (Session 1 of 4)</b> 7.30 pm, Senior Citizens Rooms 895-901 Doncaster Rd Doncaster Session 2: 13 <sup>th</sup> September 7:30 pm, Doncaster Session 3: 20 <sup>th</sup> September 7:30 pm, Doncaster Session 4: Date TBC, Hive opening, Brunswick

## APPLICATIONS FOR COMMITTEE POSITIONS- NOW OPEN

### CONSIDER STANDING FOR A COMMITTEE POSITION

Keeping a club running well requires a variety of skills.

Do you have any expertise in beekeeping, IT, finance, education, marketing, or committees?

Can you offer some of your time to support the club at meetings, events and external functions?

If you wish to discuss the positions please contact either Don Muir or Andrew Wootton for a chat,

or email: [President@beekeepers.org.au](mailto:President@beekeepers.org.au) or [secretary@beekeepers.org.au](mailto:secretary@beekeepers.org.au)

# ARE YOU PREPARED FOR WINTER?

Your bees need to get through at least the next 18 weeks.

A couple of weeks ago I added an ideal to one hive as, at that time, the bees were bringing in good pollen supplies. That hive already had one full super of honey and two brood boxes.

I took the opportunity one day last week, when we had some nice autumn sun and about 20° C, to have a quick look at my backyard hives. I was quite surprised at how much they had built up winter stores. Today, the ideal, I had recently added, had seven fully capped



frames and was well advanced on number 8 (see photo, below). Eight frames in a little over two weeks, is certainly a bonus going into winter.

That same hive produced 37 kg this year. Interestingly, the hive right next door, ~ 1.2m away, gave me nothing. So, who can predict what bees are going to do? With today's bonus I am wintering 3 hives with 2 brood boxes and 1 full honey super, and the other 2 hives with an additional ideal. I am confident especially with some extra mild weather that my bees will be have sufficient feed over winter

**WELCOME NEW MEMBERS:** We are pleased to welcome 11 new Members into our club, and wish them well in their beekeeping journey. A warm welcome to: Andrew Bailey, Brett Campbell, Eloise Campbell, John Hood, Trevor Maguire, Gordon McLean, Laurens Pees, Chris Schneider, James Tan, Michael Tanner and Keith Williams.



We invite you to use the full resources of the club and the experience of our existing members to enhance your beekeeping skills and enjoyment.

# WASPS AND BEES

Don Muir

A few members have remarked on the number of wasps they have seen and what damage will they do to their bees.

As in most things beekeeping, a strong hive will be able to combat wasps much better than a weak one.

Wasps and hornets belong to the insect family *Vespidae* and like bees, they are of the insect order Hymenoptera. In fact, it is believed that bees originally evolved from wasps! Wasps are predators of bees and a pest generally disliked by beekeepers.

It is interesting to note that those people who spoke to me about wasps were all feeding their hives with sugar syrup. (Don't worry this is not an article about the evils of feeding sugar syrup). My research has shown that wasps collect meat, including dead bees, which they masticate and then feed to their



larvae in the nest. The protein helps new larvae develop and the larvae in turn excrete a sugary type of honeydew which satisfies the wasp's sweet tooth. After the larvae have hatched, the wasps have to seek their sugar fix elsewhere, usually scavenging from discarded empty soft drink cans at BBQ's, picnics or the local beehive.

Wasps can and will rob your hive. Honey bee workers die quite naturally, and these bees will be ejected by the colony as it tidies the hive in order to maintain hygiene. Wasps will happily take dead bees from around the hive entrance. However, wasps will also on occasion attack live bees whilst the bees are out foraging. We are talking of a relatively small number of bee casualties, and a colony of thousands of honey bees can certainly recover from a small scale wasp attack.

Coming into autumn when the queen wasp stops laying due to the cooling temperature and there are no wasp larvae around to produce food for the foraging wasps. They become desperate for food and it is this time of year when we begin to notice wasps. They also become bolder and more aggressive in looking for food.

Evidence is now emerging that honey bees have developed ways to ward off these natural predators by sending warning signals that predators have been seen. These signals involve the guard bees simultaneously vibrating their abdomens to create a 'shaking'

signal. This action is similar to that bees use to warm the hive in winter. In a defence mode, the effect produced is a type of Mexican wave of shaking bees. The noise and visual effect is a warning to the wasp it has been noticed, and to back away. If, however, the wasp should try and attack or get too close to the entrance a large number of guard bees will attack the wasp and kill it. The warning mechanism also has the effect of calling more bees to the defence. Although the wasps may then abandon their attempt to enter the hive, they will turn their attention to target single bees either in flight, on the ground near the entrance or when bees are foraging.

If you have a wasp threat around your hive, it may assist the bees to protect their hives by reducing the size of the hive entrance so the bees have a smaller area to defend.

If you have fruit trees near your apiary check if there is no rotting fruit on the ground, this is a sure fire way of attracting wasps into the area, so remove and keep ground clear of any fallen fruit. Sugar syrup is also another attractant so do not leave any syrup laying around that wasps may be able to consume or access.

Control wasp nests in the environment. Destroying nests in the spring and summer is clearly a good method of reducing the overall wasp population and reducing robbing problems in the autumn.

There are commercial wasp traps available and if your problem is severe, then you should consider using traps as a permanent method. Bees do not feed on protein and are not attracted to the baits. Bunnings sell a product, EnviroSafe wasp attractant for use in a range of fly and wasp traps; 3 packets for \$8. Wasps will tend to go to these traps as an easier option than the hive. Alternatively, there is a DIY trap described in an Australian Government AGVET permit (see the resources page on the club website, <https://beekeepers.org.au/MembersResources> NB you will need to be logged in to view).

One effective method I have found, albeit on only one occasion, I needed to reduce the wasp threat. I placed a tin of cat food on a plate, mixed with a good amount of ant rid, secured a mesh screen over the mix to stop animals from eating it, but enough room for wasps to carry portions back to the nest. Within 2 or 3 days the wasp threat was gone. As soon as the wasps smell the fish they basically just follow their noses and suddenly they are not troubling the hive at all. It is like someone has turned a switch and just as suddenly the bees are flying in and out foraging.

## JUNIOR'S SECTION

The next meeting will be held:

10.00 am Saturday 20<sup>th</sup> May 2017 at 33 Saxon St, Brunswick.

Weather permitting we will remove the lids and quickly check if feeding is required. If so we will make up a sugar syrup and feed the colonies.

If weather does not permit an opening we will show a film on beekeeping, with a short discussion on what we have achieved in beekeeping this year.

NOTE: No meeting will be held in June. The next meeting after May will be July.



# FLOW HIVE

Wintering with the Flow hive is essentially the same as with a normal Langstroth hive. You need to ensure that the bees in the brood box have sufficient food for winter.

- If the Flow Hive has 3 or 4 frames mostly capped, I would leave it on. If it has less than 2 frames, remove it for winter. After removing the Flow ensure your brood box has at least 2 full frames and 6 brood frames at least 50% capped with honey. This will barely be enough so you may need to heft your hive every couple of weeks to check weight and if weight appears to be getting lighter, then you may need a 2:1 sugar feed later in winter.
- If you have 2 brood boxes, leave them both on, the second box should normally have more stores in it and will ensure you make it through winter satisfactorily. Ideally for a 2 brood box you want the equivalent to 8 to 10 full frames of honey.
- Remove the queen excluder
- Check the entrance to make sure it is not getting cold winds directly into it, if it is then put up a wind barrier, also ensure it is above ground level and will not flood. If you have a standard lid I would take the gable Flow hive lid off and replaced with hive mat and normal flat lid.
- Check that weeds and other objects are not impinging on the opening.
- Warm wash the frames and store in sealed plastic bags to protect from pests until next spring.

## DAY TRIP

**Saturday 22nd July 2017 – Day trip to Maryborough is planned**

- **Whirrakee Woodware** (bee keeping equipment manufacturer) and
- **Gell's Honey** (commercial apiary).

The Whirrakee factory will be in full production. It will be a great opportunity to see supers and frames being made from sawn timber through the whole process up to and including hot wax dipping and painting.

We then move onto Ken Gell's property and have the opportunity to see a large scale commercial operation and hear about beekeeping from a commercial aspect.

Early booking is advised as there are only 56 seats available.

The bus will leave Doncaster Secondary College at 8.00 am and return ~5.00 pm.

Lunch is included.

Cost to be confirmed as soon as possible (currently estimated to be \$25 per person).

Details and booking registration will be on the web site under events.

Go online and register early so as not to be disappointed.

# MENTOR VISITS



The last of our mentor site visits took place weekend of 29/30th April and all events were sold out.

We have now had ~100 members attend these sessions and the feedback from those attending has been very encouraging.



Based on the success of this year, Site Mentor visits will be undertaken next year. It is a very practical way to educate and for members to see the performance of other colonies, and exchange bee-keeping ideas.

# LET SMOKE NOT BEES GET IN YOUR EYES

Andrew Wootton

Recent incidents have highlighted the importance of correctly using your smoker.

Earlier this year, a new beekeeper was advised that no smoke would be necessary while rehousing a nuc into a full size hive. The bees became extremely defensive, got inside his suit and caused a severe adverse reaction resulting in (fortunately brief) hospitalization. The still open hive had to be abandoned for later reassembly.

When a couple of our experienced rescue team attended next day, they used smoke and reported that the bees behaved calmly. The hive was removed to another location without further problems.

In a second incident, an inexperienced beekeeper sought help from a beekeeper offering a paid mentoring service. The hive was opened without smoke and erupted. A plumber on the next door roof was stung and had to stop work. The neighbour's children were chased indoors. Angry bees pursued the disillusioned beekeeper back to his house and the mentor to his car.

I was asked to attend a couple of weeks later to assist with these 'fierce' bees. I smoked the hive as normal, waited a minute and then inspected both brood boxes and the honey super. All frames were removed and examined and the queen was sighted. A couple of honey frames were taken for crush-and-strain harvesting with the bees being shaken off. I worked without gloves. No stings!

Smoke has been used in beekeeping for a least 7000 years. Both the ancient Greeks and Romans give instructions for its judicious use. Smoke has two effects on bees, interfering with their ability to smell and leading to them engorging with honey. The number of guard bees at the colony entrance is reduced for 10 min or more and chemical communication of alarm pheromone is inhibited. We don't really understand the mechanisms by which smoke reduces defensiveness; although there are theories about bees consuming honey in preparation to escape fire, this may reflect our tendency to anthropomorphize. Afterwards, bee antennae recover their electrochemical sensitivity in 10-20 min and the numbers of bees engorging decline over the same period. I have yet to come across any evidence that using smoke harms bees. Indeed, by not triggering the colonies defensiveness you ensure you will kill fewer bees (stinging is fatal for them). And although any inspection is likely to cause minor interruption to foraging, an angry colony will be disrupted for several days before returning to normal.



Photo: Laura Youngson

Based on the above, why are these bee calamities occurring? Is this some whim amongst followers of 'natural' beekeeping practices, thinking that smoke is noxious and that they are being bee-friendly? Or some sort of competitiveness around "I don't need to use smoke"? Surely it's not because people are too lazy to light their smokers. Whatever the reason, I believe it's a failure of our responsibilities as beekeepers. Unless we can guarantee that our bees are well behaved, we really shouldn't be keeping them in an urban setting. So it is imperative that you always have a lit smoker at the ready when you open a hive. If you then find you don't need to use it that is fine, but it's too late to go and light it when the bees go ballistic.

## AROUND THE WORLD

One of our members, Glenda Wise, is doing it pretty tough at the moment. She has just had a few weeks in Morocco, mountain hiking and climbing and, is now in the South of France. Here are some photos she sent in which may be of interest.

*This area in the High Atlas Mountains in Morocco, is known as Happy Valley. Most bees here are lovely dark little things, working amongst thousands of apple and walnut trees, and farm crops within this very fertile valley inside an arid desert. The weather here at the moment, is glorious, mid to high twenties, but is under snow in the winter.*



*This is  
beekeeping  
country,  
Morocco*



*Would you  
pay  
AUD\$ 172  
for 100 g  
of Manuka  
at  
Melbourne  
Airport?*

*This is a better  
idea of where  
the bee hives  
were in the  
fertile valley of  
this stark  
alpine desert.*





## WHAT'S NEW?

The club has purchased an Observation Hive for teaching purposes. In due course it will be populated, and, no doubt, be a source of awe and wonderment to many who have never gotten up close to bees.

## A POSSIBLE LINK TO COLONY COLLAPSE DISORDER

### Use of imidacloprid - common pesticide - linked to bee colony collapse

**More information:** Honey constituents up-regulate detoxification and immunity genes in the western honey bee *Apis mellifera*, Published online before print April 29, 2013, doi: 10.1073/pnas.1303884110

#### **Abstract**

As a managed pollinator, the honey bee *Apis mellifera* is critical to the American agricultural enterprise. Recent colony losses have thus raised concerns; possible explanations for bee decline include nutritional deficiencies and exposures to pesticides and pathogens. We determined that constituents found in honey, including p-coumaric acid, pinocembrin, and pinobanksin 5-methyl ether, specifically induce detoxification genes. These inducers are primarily found not in nectar but in pollen in the case of p-coumaric acid (a monomer of sporopollenin, the principal constituent of pollen cell walls) and propolis, a resinous material gathered and processed by bees to line wax cells. RNA-seq analysis (massively parallel RNA sequencing) revealed that p-coumaric acid specifically up-regulates all classes of detoxification genes as well as select antimicrobial peptide genes. This up-regulation has functional significance in that that adding p-coumaric acid to a diet of sucrose increases midgut metabolism of coumaphos, a widely used in-hive acaricide, by ~60%. As a major component of pollen grains, p-coumaric acid is ubiquitous in the natural diet of honey bees and may function as a nutraceutical regulating immune and detoxification processes. The widespread apicultural use of honey substitutes, including high-fructose corn syrup, may thus compromise the ability of honey bees to cope with pesticides and pathogens and contribute to colony losses.

Source: National Academy of Sciences.

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