THE BUZZ - EDITION 433 MAY 2021

# THE BUZZ

The official newsletter of the Gold Coast Amateur Beekeepers Society Inc. Est. 1979

Website: <a href="mailto:gcabs.net.au">gcabs.net.au</a>

F Gold Coast Amateur Beekeeping Society





Tetragonula Carbonaria spiral brood structure, photo by Kara Froggatt

#### **DATE SAVERS**

COVID regulations have eased, but our planned events may still need to change if restrictions are reinstated. If so, you will be notified via our Facebook pages & email.

The Gold Coast Amateur Beekeeper's Society inc. welcomes new members, existing members and visitors to attend and volunteer at all events. Non-members attending member meetings will be asked to make a gold coin donation.

- Sun 16th May 2021 10am 12 noon: Members' Meeting. Location: Country Paradise Parklands, 231 Beaudesert-Nerang Rd, Nerang. Activities: Native Bee Talk by GC Native Bee Services: Kara & John Froggatt. Gifting of Native Bee Hive Agistment to Nerang Community Garden. Native plant stall from Native Plant QLD GC, other fun activites to celebrate World Bee Day Branch. You must register to attend: <a href="https://www.gcabs.net.au/events/member-meeting-880">https://www.gcabs.net.au/events/member-meeting-880</a>
- **Thursday 20 May WORLD BEE DAY:** Join the Global Waggle Dance. <a href="https://www.worldbeeday.org.au/waggle/">https://www.worldbeeday.org.au/waggle/</a> Submit your video by May 10th
- **Sat 5th June QBA Open Day** GCABS Attending as information stall. See page 5 for details

- **Sun 20 June 2021 10am 12 noon**: **Members' Meeting**. Location: GCABS' Clubhouse area, Country Paradise Parklands, 231 Beaudesert-Nerang Rd, Nerang. Activities: Talk by Willow Hankinson on Top Bar Hives. You must register to attend: <a href="https://www.gcabs.net.au/events/member-meeting-880-657/">https://www.gcabs.net.au/events/member-meeting-880-657/</a>
- Sun 18th July 10am noon: Members' Meeting. Details TBA
- Sun 22nd August 10am- noon GCABS' Annual General Meeting. See page 6

#### From GCABS President



As the sun begins to set earlier and the cooler mornings are starting to arrive, we'll soon be saying goodbye to another bee season. I hope everyone's bees will be warm and snug, with full bellies to see them through the short winter that passes across the Gold Coast and Northern NSW.

The honey season might have ended, though there is no rest for us Beekeepers; the season of maintenance has begun. I'm sure we can all relate to the dreaded Beekeeper's To Do List, which somehow never seems to end. Good preparations and planning are key to aid a successful season, that our industrious bees kindly bestow upon us.

The May Meeting is shaping up to be another jam packed event, with something for everyone: a Native Bee Talk by John & Kara Froggatt (GCABS Members), Plant Stall by Native Plants QLD GC Branch, World Bee Day activities and an Acknowledgement of our friendship with Nerang Community Garden. What a morning of excitement awaits us. See you all there.

Ross Krumbholz



## A hearty welcome to our newbee members who joined GCABS in April:

Maurice M, Ryan M, Brittany R, Edwina W, Fiona W

#### May Honey Flora - S.E. Queensland

Submitted by Jim O'Regan

Banksia. Black Sheoak. Broad-leaved Banksia. Flooded Gum.Glycine. Golden Candlesticks. Hickory Wattle. Honeysuckle Oak. Mountain Coolibah. Paper-barkedTea-tree. River Sheoak. Rose Sheoak. Tumble-down Ironbark. White Box.



Golden Candlesticks



Broad leaf banksia



Gordonia (fried egg flower)

### **Recognising Member's Achievement**



GCABS wishes to congratulate our fellow member Corinne Jordan, owner of The Bee Lady Apiaries. Corinne has been awarded a scholarship by the Wheen Bee Foundation to participate in the 5Bees project, which will allow beekeepers to trial new technologies and practices in their businesses over the next three years.

Corinne is an exemplary queen bee breeder & qualified beekeeping instructor. She has presented at the GCABS' meetings & offers an

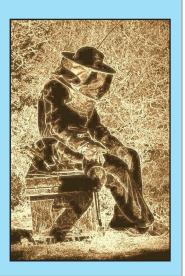
insightful article on Laying Workers in this newsletter. See page 7.

#### **VALE Peter Moore**

It is with great sadness that we farewell Peter Moore who passed on 27th March, 2021. Peter was a valued long-term beekeeper friend to GCABS, who with wife Bev, shared GCABS Field Days, GC Show & Mudgeeraba Show selling their range of beeswax based lotions & polishes.

Many of us fondly remember Peter as the "shoe-shine man" as he'd enthusiastically buff & polish the boots of passers by at the shows. Peter was a long-term member of the QBA & a founding member in 1987 of the Bayside Beekeepers Association.

He will be fondly remembered as "a great bloke who loved family, bees, a chat, a coffee and a joke". Our heartfelt condolences are with Bev and family at this sad time.



#### **April Raffle Result**

Congratulations to Warren & Marcia McMahon whose name was drawn for the POETRY raffle. What lyrical images your poems create: Here's a sample of little poems composed at our April Members' Meeting:

Gold Coast Amateur Beekeepers,

Always busy, never sleepers.

By Pam

We are here to learn on this glorious day,

All about making foundation – Hooray! By Marion C.

To check my hive, suit up to survive, My Beautiful bees are ALIVE.

And sometimes make me jump & jive. By Warren & Marcia M.



#### **MAY RAFFLE: Honey Recipes**

Our most DELICIOUS raffle ever!

How to enter: Post your favourite 'honey recipe' either to the Facebook GCABS Members Forum page or email to gcabs.editor@beekeepers.asn.au One raffle ticket per member. Entries close midday, May 31st.



#### **April Meeting Review**

Thanks to Jim O'Regan

The April meeting was held on a beautiful sunny autumn day at Mariefields, a permaculture farm south-west of the village of Tyalgum at the foot of the magnificent escarpment of the Tweed Range. This property has an interesting history. It was purchased in the late 1980's by the late Bill Mollison, a world renowned advocate of permaculture who developed it into an economically & environmentally viable permaculture farm. The present owner, GCABS' member Dr. John Quayle & family, purchased the property in



2017 to continue permaculture principles. A prominent advantage is the property has had no chemicals applied for at least forty years. Dr. Quayle gave an interesting talk on the history of the property and its future aims.



Three demonstrations were arranged using beeswax. Dr. Quayle demonstrated the making of foundation wax, ably assisted by Syd. A plywood board cut to the size of a foundation sheet was dipped in a detergent solution and then one side was dipped in molten beeswax. It was then given a few moments to cool & was dipped twice more. The edges of the sheet were then trimmed with a knife and the sheet was removed from the board thanks to the detergent preventing sticking. The sheet is

then passed through a machine which resembles an old fashioned clothes wringer with rollers having the pattern of the honeycomb. Leonie made the point that it's terribly labour intensive and that at \$2:90 a sheet, it's not a bad buy from your local bee supplier.

The second demonstration was making beeswax candles with Russell Graham. Beeswax burns at a different rate to paraffin or soy candles so it is





important to use quite a heavy gauge wick, to ensure the wax fully evaporates as it burns. If the wick is too fine, it will simply burn a well down through the centre of the candle.

The third demonstration showed us how to make lip balm and was conducted by Victoria Clayton. Victoria gave advice on many aspects of the production of lip balm. The little jars of balms were later gifted to several lucky recipients. The lip balm recipe will be published in the June Buzz.

#### Gifting of Native Hive to Nerang Community Gardens

On Sunday 14th March, GCABS members, John and Kara Froggatt installed a hive of Native Bees in the Nerang Community Garden, part of our community building initiative as new members of the Paradise Country Parklands family.

The hive type is a 'FROTH' hive, (Froggys 'Riginal Other Type Hive) which is a vertical split hive especially designed to split Tetragonula Hockingsii easily and evenly. This is an older established colony that is strong and healthy and hopefully will find lots of nectar and pollen in the gardens to bring back to the hive stores and the hatching larvae.

The bees themselves are one of the eleven species of social native bees, Tetragonula Hockingsii, and are more or less indistinguishable to the non-scientist from the popular T. Carbonaria with the spiral brood.

Hockingsii have a more unstructured brood mass and are generally considered to be slightly more defensive when their hive is split by humans making them a generally strong hive of bees. Kara reports that on warm days, you can smell their open honey pots.





Kevin and Neil, Community Garden members, were on hand to help install the bees and watch them do their reconnaissance flights as the girls realised they had been moved and started circling the hive and resetting their internal "GPS".

Kara and John are looking forward to running workshops and information sessions about native bees at the Community Gardens during the year. GCABS are very grateful to Kara & John for enacting this installation on our club's behalf. We look forward to hearing their presentation on native bees at this month's Members' Meeting, May 16th.

### QBA Open Day June 5th 9:00am - 3:00pm

This is a terrific event to add to your calendar. The Open Day offers a great program of speakers, a wide range of beekeeping equipment sales, a Q&A session for all your beekeeping queries.

GCABS will be there with an information stand also. Come and join your fellow beekeeping community for an action packed & enjoyable program.



#### Your Club Needs YOU for the 2021-22 GCABS' committee

Nominations are open! If you are a willing worker, a contributor, a leader or strong team player, love bees and have a little spare time, then PLEASE step up to help run our fabulous club. Elections will be held at the AGM Aug. 22nd 2021.

Print the nomination form below. Complete your nomination and return the form to any current committee member, contact details are on the back page. Or email your completed form to gcabs.secretary@beekeepers.asn.au



Being part of the leadership team is a rewarding and empowering experience. By serving others, we all grow and benefit.

GCABS AGM NOMINATION FORM Election of Office Bearers and Committee Members 2021 - 2022
POSITION  [please tick desired position]  President  Vice President  Secretary  Treasurer  Member of Committee (includes Buzz Editor, Librarian and other committee positions)
NOMINATED CANDIDATE'S NAME :
NAMES OF PEOPLE MAKING THE NOMINATION:
We, and  [PRINT names here - must be current financial GCABS Inc members] submit the named candidate for the above marked position in the management committee.  Signature of Proposer 1:  Signature of Proposer 2:
Consent of Candidate
I, (name of nominated candidate) (please print your name)
am willing to take on this role if I am elected to this position at the Annual General Meeting of the Association.
Signature of candidate: Date:

### **Laying Workers**

by Corinne Jordan <a href="https://www.facebook.com/thebeelady1">https://www.facebook.com/thebeelady1</a>

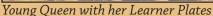
I have never had an issue fixing up laying worker hives but when I really analyse why my method works, I realise the subject is a minefield! The consensus is if you have laying workers then your hive (colony) is doomed.

Firstly, what are laying workers, why and how do they develop?

Researches have found around 1% of worker bees will be laying in a colony at any given time. Laying workers are worker bees whose ovaries have developed. Only problem is they have not been mated so are only capable of laying unfertilised eggs (drones). These are laid in worker size cells and become dwarf drones.

A good indication you have laying workers is drone brood in worker size cells. Look for the typically raised dome shaped capping of drone brood. Another good indication is multiple eggs often on the walls of cells as workers abdomens are not usually long enough to reach the bottom of the cell. They also lay eggs on pollen stores (bee bread) and multiple eggs in queen cups. Not all instances of multiple eggs in a cell indicates laying workers. Sometimes young queens will lay multiple eggs in one cell too. The difference is evident when you look at the pictures below, young queens' eggs are uniform and attached to the bottom of the cell. Laying workers leave lots of debris behind and eggs are attached everywhere.







Laying Workers, messy laying.

In a normal queen right colony both queen pheromone and broodpheromonework together to suppress the activation of worker bee ovaries. It's the absence of these pheromones that allows multiple laying workers to develop in a colony (hive) that is both queen less and without brood.

From personal observations laying workers usually start to develop around 6 - 7 weeks after a queen is lost.

Strange things happen in laying worker colonies which can trap new and inexperienced beekeepers. Beware the extra-long queen cell! Looks like a great queen supersedure cell but in reality, is a futile attempt by the drone laying worker colony to create a queen from a drone egg. Fig 5. These cells typically won't develop past the larval stage but will persist past the normal development time of 16 days for a queen cell. If you see an extra-large, capped cell in your hive and no queen or brood and it's still there 9 days later, investigate the contents. See pictures at the to of the next page.

#### So how do you fix this mess?

The solution is to return the colony to queen right brood / right status. There are various methods; all involve lots of work and removing resources from other hives which may be counterproductive and weaken hives for the sake of saving older worker bees not receptive to a queen as they already think they have one.





In a queen rearing operation we encounter this problem regularly and luckily it is easily rectified in a mating nucleus size colony (3-4 full depth frames). Add one frame of open brood with attaching nurse bees (a dusting of icing sugar helps prevent fighting on merging) and the following day add a caged queen. The newly added bees sensing all is not right take care of the laying workers. The open brood and the caged queen rectifies the colonies pheromone status.

This one measured 4cms

#### What if it's a large colony?

It is likely to have many laying workers and may be more work than it's worth to save but the same principle applies. It can be fixed if enough bees, brood, and a queen are able to re-establish "normality".

#### Here's some ideas that should work.

Method 1. Add a frame of open brood once a week for three weeks until the bees start to make queen cells from the added brood signifying they will be receptive to the addition of a new queen. Works by slowly shutting down laying workers due to brood pheromone and as older laying workers die off, numbers are reduced. Keeps colony population stable.

Method 2. Combine in a nucleus hive using the paper method; could still fail if nucleus hive is not strong enough to oust the laying workers.

Method 3. Switch position with a strong queen right hive, add open brood, add a caged queen after several days. Disadvantages: likely to be lots of fighting and loss of bees from both strong hive and laying worker hive.

Method 4. Shake the remaining bees out to find new home if you have other hives or destroy colony and start again. Remember they are older bees anyway at the end of their lives so probably not worth all the resources to save.

Method 5. Paper the remaining bees onto another strong colony. Best option during late autumn winter months when replacement queens are not readily available.

Prevention is better than a cure! Queen less hive? Do not let it get to the laying worker stage. Inspect regularly at least every 2 weeks in peak swarming season (Late July to early October in South East Queensland) and 3-4 weeks at other times of the season. Choose a sunny windless day when temperatures exceed 20 degrees for autumn winter inspections and limit the time brood is exposed to low temperatures. Remember brood nest maintains 34.5 to 35.5 degrees on average and beehives on the coast in south east Queensland maintain brood throughout the year.

Be observant, the hive entrance can tell you a lot about the status of a colony; see anything out of the ordinary then a brood inspection will reveal the answer.



Eg Excessive drones entering and leaving a colony outside of normal mating flight hours, diminishing population of worker bees are some of the signs that indicate a possible queen failure or laying worker situation.



Laying workers starting a queen cell

In conclusion, laying workers present a difficult situation and lots of skilled intervention to rectify. They require enough brood, bees and a queen to establish normality. The larger the colony, the more brood and young nurse bees (resources from other colonies) are required to fix it and there is no insurance it will work.

Shaking worker bees out several 100 metres away does not work. All the best in your beekeeping journey and I wish you every success with your queen less colonies whichever method you choose.

#### **JOBS** in Your Bee Yard this month

Thanks to Paul Fullwood of Greenwood Bees for this info.

Autumn is the time to prep for winter. Follow 5 key points:

- 1. NUTRITION ensure your bees have PLENTY of honey. For a large colony, allow a full box of honey. If you have less, feed 1:1 water:sugar syrup
- 2. COLONY STRENGTH a weak hive will grow weaker & may not survive winter. Combine with a strong colony using the 'newspaper' method if you have more than one hive.
- 3. BEE SPACE Put the maximum numbers of bees into the minimum space. Remove excess supers. Take out & store empty frames & freeze extra honey frames to feed back if needed.
- 4. LOCATION Ideally, bees do best with full winter sun. Make minor adjustments to maximise sun exposure & minimise wind exposure eg trim branches, turn entry away from a prevailing wind.
- 5. MINIMISE INSPECTIONS Learn to READ THE HIVE, without lifting the lid. The aim as the weather cools is to not cause chill by opening unnecessarily. Activity level at the entrance Does the population look busy enough for the number of boxes? Is there plenty of pollen coming in? Is the sound calm? Is the smell sweet/good or sour/concerning. If you heft the back of the super is it heavy with stores or light & need feeding?

#### **Library Corner**

Articles in May 2021 issue of The Australasian Beekeeper:

- Celebrating World Bee Day
- Bee friendly farming
- Minimising the possibility of bees robbing your honey
- Hungary and production of their specialised Acazia honey
- Mexico's resurgence of their oldest bees and their potent medicinal jungle honey
- Native Forest Changes Affecting Apiculture and Crop Pollination
- Honey over sugar as a sweetener and an anti-diabetic agent
- A closer Look at the Greater Wax Moth.

If you wish to borrow this or any past issues of ABK, or any of our other library resources (see <a href="https://www.gcabs.net.au/library">www.gcabs.net.au/library</a>) contact Ann Allen



#### **COMMITTEE**

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#### **Need to Feed Your Bees for winter?**

V's Bees, Nerang has Pollen supplement and Syrup Feeders









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