THE BUZZ - EDITION 445 JUNE 2022

# THE BUZZ

The official newsletter of the Gold Coast Amateur Beekeepers Society Inc. Est. 1979
Website: gcabs.net.au Gold Coast Amateur Beekeeping Society





#### **DATE SAVERS**

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

#### **MEMBER MEETINGS - May & June**

- Sun 19th June 10am noon Member Meeting. Topic: The Flow Hive. Meet Stuart Anderson, who co-invented the Flow Hive with his son Cedar. Bring along all your Flow questions for Stuart to address. Location: GCABS club house.
- Sun 17th July 10am noon Member Meeting. Topic: Swarm Prevention & Management. Presenters: Kevin Tracy of Bee Zone Apiaries & Kathy Knox, GCABS Secretary & Education Officer. Location: GCABS club house.
- Sun 21st Aug 10am 12:30pm Member Meeting. Join in our (rescheduled from rainy May) Apiary Farm Visit to 'Mariefields' in the spectacular Mt Warning Caldera. Activities: Checking the hives for Spring build up. Hosted by GCABS member & Mariefields' owners, John & Carol Quayle. Address: 229 South Pumpenbil Rd, Tyalgum NSW. BRING: PPE (Beesuit/veil) & chair.

#### **OTHER EVENTS**

- Wed 8 to Sat 11 June 4th Australian Bee Congress. Further details see page 7. Program available by <u>CLICKING HERE.</u>
- Sat 11/Sun 12 June 3rd Australian Native Bee Congress
- Sun 19 June Native Plants Queensland Plant Market Day 9am 3pm at Nerang Country paradise. Bring some cash to buy lots of plants & buy lunch there as well. See add pg 8.
- **Sat 25 June QBA Open Day**. A day of presentations & expert panels, plus a trade show with equipment for sale. See poster pg 9 or <u>CLICK HERE</u>.
- Aug 6-7 BOTANICAL BAZAAR Garden & Sustainability Festival at the Nerang Country Paradise Parklands. Join fellow GCABS members by VOLUNTEERing a couple of hours to help run our GCABS stall. It's a great event. You'll love it! Contact Leonie to volunteer on 0428 177 450

#### From GCABS President



By now we should all have our bees hunkered down for the winter. Whislt where we are in Robina we have been fortunate and have not had to feed our bees, with good nectar supplies around, still as we go into winter the bee numbers in our hives are lower and we have pared our hives back to the brood box and one super so they have less space to manage. We need to give our bees every chance to keep themselves warm and protect from invasion of pests such as small hive beetle. Just make sure that in going from two honey supers down to one you leave them plenty of honey supplies in the remaining super (see Leonie's article on page 5).

For our top bar hive we also removed a few frames and gave them less space to have to look after until Spring. It is very easy in a top bar hive as you can remove just the

number of frames you want without having to make the decision to remove a whole super.

Last months members meeting we were meant to visit John Quayle's apiary, but the rain had other ideas! Some quick pivoting to move the meeting back to our club house and we had a great meeting covering wax processing, hive thermodynamics, and an expert Q&A panel. Member meetings are a great opportunity to learn. No matter what your experience level you will learn something, not to mention great socialising, and I encourage everyone to come and participate.

Lastly, and I know I made this request last month, but due to various reasons from moving to illness, our committee ranks have thinned a bit, and a lot of work is left to a few. Whilst we have our AGM later in the year to elect the new committee, we would greatly welcome anyone willing to step up and lend a hand on the committee at this exciting time in our clubs growth. Please email me at <a href="mailto:president@gcabs.net.au">president@gcabs.net.au</a> if you would like to help!

Cheers... Colin Allen - President



# A warm welcome to our newest members:

Russell B, Peter B, Jane D, John D, Peter M, Cat P, Olav R

#### **COMMITTEE MEETINGS**

All welcome to attend our online Committee meetings via this link: <a href="meet.google.com/fyq-ujco-kth">meet.google.com/fyq-ujco-kth</a> Next meeting Mon 6th June 6:30 pm.

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

Submitted by Jim O'Regan





Black Sheoak. Brisbane Black Wattle. Broad-leaved Banksia. Caley's Ironbark. Dusky-leaved Ironbark. Glycine. Golden candlesticks. MountainCoolibah. Paper-barked Tea-tree. River Sheoak. Spotted Gum. Swamp Messmate. Tumble-down Ironbark. White Box.





#### **May Member Meeting Review**

by Leonie Schwarzel

....And the rain came tumbling down, down! It was disappointing to have to reschedule our apiary visit to Mariefields, Tyalgum, due to prolonged & excessive rainfall. However, we have rescheduled the event for August 21st, so fingers crossed the sun will shine upon us then.



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Meanwhile, what a varied & informative meeting we had at the clubhouse. Thanks to Kathy Knox for demonstrating wax processing. Clean, rendered beeswax fetches a premium price, so it is highly worthwhile to melt & filter out the 'slum gum' to produce those golden blocks of wax.

In his talk on thermodynamics of the hive,' Jim O'Regan boiled water in a see-through glass kettle to demonstrate how warm moist air rises, cools then drops, rather than the steam all escaping from the top of the kettle. This is how air circulates in a hive. Jim emphasised that a vented base allows the excess condensed water to escape so that the hive remains drier overall. Jim's home made vented base undertray, with a layer of lime



powder, provides both the desired ventilation & captures the small hive beetle that the bees eject. See Jim's article following this review.

Thanks to our expert panel for the Q&A. Kevin Tracy, Kathy Knox, Keith Barton & Jim O'Regan provided practical answers

to members' questions. This popular segment will be incorporated on a semi-regular basis to address the ongoing need to educate & address beekeeping concerns.

The 'Show & Tell' of

lesser known but useful beekeeping equipment was an interactive session with members guessing or informing of the use of various equipment. Do you have an innovative tool or beekeeping practice that you use? Send a photo & short description to the editor for inclusion in a future Buzz edition. Send to <a href="mailto:gcabs.editor@beekeepers.asn.au">gcabs.editor@beekeepers.asn.au</a>

Thanks to Preston for these photos.

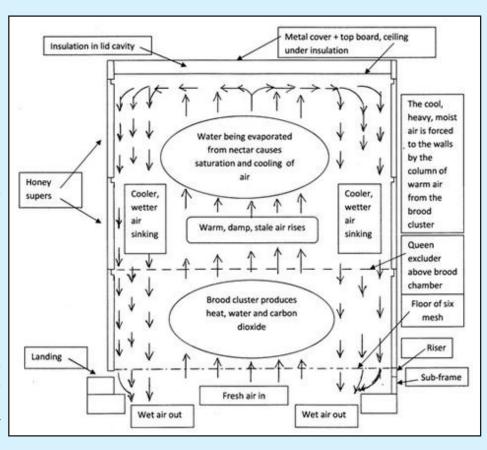


#### **Beehive Ventilation**

Jim O'Regan

The modern beehive was designed by Lorenzo Langstroth and patented in 1852. Its major feature is removable frames. The present day beehive that most of us use doesn't look much like the patented version but the structure and features are the same. The July 2015 edition of The Buzz contains an article on beehive ventilation by John Tadman, a retired thermal engineer who became a beekeeper in retirement. The Langstroth hive contained a fault that Mr. Tadman recognised and solved.

For 160 years beehives were ventilated incorrectly and most still are. Mr. Langstroth's hive is ventilated through the lid because everyone knows heat rises. But as it rises, it does something else; it cools. The hive's heat is generated in the brood and the hot air rises through the honey super to the lid. On the way it absorbs a lot of moisture from the honey being matured in the honey frames and loses 1 ½ to 2 degrees of warmth, enough to create a thermal syphon. The central column of air is moving up constantly, cooling and becoming heavy as it passes through the honey super and falling down the sides of the hive to the floor. If there is a vent in the floor, this





Jim's ventilated tray under his screened hive base. Note the holes all round the sides for air flow. Note also the use of lime to catch the many small hive beetle which can be seen therein.

moist air will exit from the hive and be replaced with fresh air through the front doorway. If there is no vent in the floor, this moist air will re-circulate and cause high humidity in the hive which promotes mould and attracts the small hive beetle.

A vent in the floor is a convenient place to incorporate a beetle trap. I make my own bottoms and cut a hole 210mm x 170mm. It's covered with a mesh that permits beetles but not bees. Under the hole is a tray with agricultural lime in the bottom to kill the beetle. The tray has holes in the side to permit the flow of air because we must not forget that the prime purpose is to ventilate.

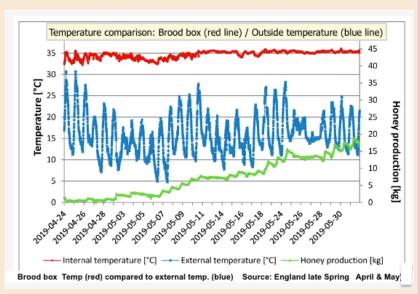
#### Will my bees be warm enough through winter?

Compiled by Leonie Schwarzel

The answer is likely a resounding 'Yes' as long as you follow a few easy guidelines.

Honeybees are masters of temperature modulation. They implement a range of behaviours to establish a sustainable in-hive temperature which allows them to survive & thrive through the seasons of both our humid Gold Coast summers and our reasonably mild winters.

On average, overnight temperatures during the colder Gold Coast months range from 8-13C degrees, while hinterland areas range between 2-12C. In response to the cold, in the centre of the hive the bees gather together in a tight knot called a "cluster" to stay warm. The cluster extends above & below the queen excluder (if still present). While the bees on the outside of the cluster are tightly packed, the centre is far looser, allowing the queen, her entourage & nurse bees to move around. In our region, it is not unusual for the queen to continue to lay, albeit a lesser number of eggs, since



a good size cluster has the capacity to keep the temperature at the required 34-35 degrees needed to successfully raise brood, even when the overnight temperature drops considerably. See the graph with this article. Note that the temp in the brood box (red line) remains at a fairly consistent 34-35C despite outside temps (blue line) ranging from 5C to 30C.

- 1. So your bees will be warm enough this winter as long as you follow these guidelines:
- 2. Ensure your hive space is crowded The maximum bees in the minimum amount of space holds true. When bees are crowded, they have less space to warm. This means they consume less honey stores to replace the energy used in warming.
- 3. Ensure your population is strong More bees means a larger cluster, so there are more to share the load of generating & maintaining warmth. If you have a weak hive and you are confident it is disease free, consider removing the queen and combining it with another hive. A stronger hive will always fair winter better.
- 4. Locate your bees in a sunny position through winter. Okay, they can cope with shade but need to work longer & harder to maintain their required temp & will consume considerably more honey resources in the process. Also, bees in the shade will need to cluster until later in the morning when they would otherwise be sending out foragers if the weather is warm enough.
- 5. Ensure your bees are dry Dampness is a killer in the cold weather. The cluster cannot adequately preserve heat. Locate your hives off cold damp ground, in a sunny position. Cover the roof if you have had any rain ingress. If you use chux cloths for SHB management, replace often or remove because they absorb a lot of water & can generate mould on the tops of frames.
- 6. Do Not Disturb: Avoid inspections unless you are worried that there is a problem. Disturbance affects critical temperatures and increases stress &movement. Sudden drops in temperate inside the colony, affects three critical temperatures:
  - Brood temperature, affecting mortality rates
  - Air temperature, affecting the micro-climate of the hive inducing increased heat generating activity & increased food consumption
  - Body temperature of the bee, which can force workers to change tasks to increase their warmth.

#### **GCABS Mentoring Program**

John Vallance, Membership officer

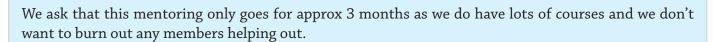
At GCABS we have come up with a MENTORING program to help share knowledge and give our new members the best chance of success through their beekeeping journey. By working one-to-one as mentor/learner we hope to eliminate the "ask a question online and get 10 different answers" which can just add lots of confusion to what you really need to be doing.

To be able to access the Mentor program you will have to first complete GCABS Beginners Beekeeping Course. This is a really great way to get some hands on experience and also to improve your knowledge about bees. We understand that 2 half days is never enough and some will require additional sound advice along the way. This is where the mentor comes in. It will be up to the individual and the mentor to figure out what works best to provide that little helping hand over the next few months. This can be in the form of text messages or phone calls or even an apiary visit.



Once you have completed the course, then please email John Vallance (Membership) at gcabs. membership@beekeepers.asn.au to say you have

completed your course and would like to be paired with a mentor. From here a mentor will be sought and they will contact the Learner.





If you wish to become a mentor and spread the load and locations around for maximum coverage, then please also send an email to John (email address above).

Don't forget that the club also offers other great FREE learning resources including "The Buzz" monthly newsletter, Monthly Member Meetings (3rd Sunday each Month) and also the Library of books at GCABS Clubhouse (available for loan at each monthly meeting from Ann, our librarian). In addition, Bee Zone Apiaries owner & trainer Kevin Tracy offers regular educational courses with a discount available to GCABS members.





#### Commemorating 200 years of Honey Bees in Australia

Compiled by the editor, Leonie Schwarzel, with special thanks to Greg Hamwood

This year, 2022, marks 200 years since honey bees arrived & successfully established themselves in Australia. When colonists settled here, it wasn't long before they missed the comforts and familiarities of home. What followed was the introduction of many plants and animals brought over on ships including the ship 'Isabella' carrying convicts, free settlers & a colony of European honey bees (Apis mellifera).

The Royal Australian Mint regularly releases coins to commemorate or honour different events and people in our history. Currency is their way of helping tell the stories of Australia. So to commemorate the bicentenary of the honey bees' arrival, the Mint has issued a honey bee themed \$2 coin. In fact, two types of the honey bee coin have been issued.





The Isabella

Firstly, there is an uncirculated C-Mint Mark which was available from the Mint only for \$15.00. However, this coin production was limited to sixty thousand & they have already been sold out.

Secondly, there will be a \$2.00 Honey Bee coin in circulation which does not have the C-Mint mark & may not have the exact same colouring & appearance. Check your loose cash in the coming months to see if you can find a couple.

The Mint worked with the Australian Honey Bee Industry Council on both the concept and the execution. The aim of the coin is to acknowledge the key role over the past 200

years of honey bees and beekeepers in the development of Australia's agricultural & horticultural industries. In 2010 an Australian federal government report concluded that about 65 per cent of Australia's crop production depends on pollination by honey bees. It is estimated that about \$14.2 billion worth of our crops rely on honey bees for pollination.

The Mint describes the honey bee as small, yet mighty. As beekeepers, we certainly agree.

#### Sources:

 $\frac{https://www.abc.net.au/news/2022-04-09/royal-australian-mint-release-2-honey-bee-collector-coin/100976424$ 

 $\frac{https://www.australiangeographic.com.au/news/2022/05/200-years-since-the-honey-bee-came-to-our-shores-its-hard-to-imagine-an-australia-without-it/$ 

#### JOBS in Your Bee Yard this Month

Winter is the time for maintenance & to prepare for the spring build up & the start of swarm season.

- Maintain current hiveware (stored & in use) in good condition: clean, repair, replace, paint etc as needed.
- Prepare spare hiveware. Ensure you make ready a spare hive box or two with sufficient frames & foundation, lid & base in preparation to catch a swarm or to split a highly populated hive to prevent swarming.
- Ensure your bees are cosy. Make sure you have the maximum number of bees in the minimum space. Remove any boxes that are less than 1/3 full of honey. Freeze excess frames to kill SHB & wax moth eggs/larva then store in dry well sealed crates. Return to the bees when needed for food or so they can complete filling them in the first Spring honey flow.
- Do not disturb. Minimise inspections. You should only inspect if you are concerned about a problem eg robbing or greatly reduced population. Choose a warm, sunny, windless day at this time of year and be time efficient. Overly frequent inspections can be harmful. The sooner you close up, the sooner the bees can regulate the temp again.



A weak, hungry hive being robbed

- Monitor for sufficient food stores. Heft the back of the honey super slightly. If it is lightweight, your bees will likely need feeding.
- Make sure your hives are staying dry inside. Ensure no rain ingress. Cover the lid with a board if you have leakage. If you have a solid basedboard, ensure your hive is tipped forward slightly to evacuate moisture through the entrance.





### Queensland Beekeepers' Association Inc.

# OPEN DAY



Saturday 25th June 2022

Beekeeping Trade suppliers are onsite for the day, offering demonstrations and product sales.

## Warwick QLD

Location: Condamine Apiaries, Wheatvale via Warwick

Entry gates open 8.30am

Expert Panels and Specialist Presentations are offered throughout the day.

Food & Drinks available for purchase at the event.

Check out our Facebook page for more information: https://www.facebook.com/qldbeekeepersassociation

For trade exhibit information contact Paul Reid via email: skyscreamer17@gmail.com



#### **COMMITTEE**

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