


THE BUZZ



The official newsletter of the Gold Coast Amateur Beekeepers Society Inc. Est. 1979
 Website: gcabs.net.au  [Gold Coast Amateur Beekeeping Society](https://www.facebook.com/GoldCoastAmateurBeekeepingSociety)



This beautiful image, titled 'Queen Bee' was created by Louise Smith, a digital artist and is shared with her permission.

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 15th May 10am – 12:30pm Member Meeting.** Join in an Apiary Farm Visit to 'Mariefields' in the spectacular Mt Warning Caldera. Activities: World Bee Day celebration, hive inspections, sugar shake. Hosted by GCABS member & Mariefields' owners, John & Carol Quayle. Address: 229 South Pumpenbil Rd, Tyalgum NSW. BRING: PPE (Beesuit/veil) & chair. NOTE Access to Tyalgum is via Chillingham due to a road closure on Tyalgum Rd.
- **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.

OTHER EVENTS

- **Beyond Beginners Seminar/Courses.** For those ready to move beyond the basics! Bookings available for 11th May, 15th June and 13th July. [CLICK HERE](#) for info!

- **Fri 20 May World Bee Day**
- **Wed 8 to Sat 11 June – 4th Australian Bee Congress.** Further details see page 7. Program available by [CLICKING HERE](#).
- **Sat 11/Sun 12 June – 3rd Australian Native Bee Congress**
- **Sat 25/Sun 26 June - Mudgeeraba Agricultural Show Venue: Mudgeeraba Showgrounds.** Enter your honey products in the show. Stall **VOLUNTEERS URGENTLY NEEDED**. Please donate 2 hours of your time to help. Phone or SMS the editor 0428 177 450 if you can help! For competition schedule click on 'Pavilion Schedule' via [THIS LINK](#).
- **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 [CLICK HERE](#).

From GCABS President



As we enter the “quiet time” for us beekeepers, our greatest responsibility is to ensure our bees are well set up for winter, such as winter is here. An inspection to make sure our bees have plenty of honey (some parts of the Gold Coast and northern NSW are faring worse than others when it comes to honey production due to poor food supplies), and that we have strong bee numbers and our bees are not being asked to look after too much space. Removing that extra honey super may be the best thing you can do for them.

This quiet time is also a great opportunity to advance our knowledge and understanding of bees. Reading good books, attending GCABS educational sessions, and generally understanding our bees better is time very well spent!

Last months members meeting was presented by our Buzz Editor, Leonie, and was a cracker. I learnt so much as I know all the others who attended did. Part of Leonie’s content is summarised in this months Buzz. This months meeting is an apiary visit at Mariefields. It is such a lovely drive out there, and our last trip there was so very interesting. Check out this months Beekeeper Spotlight on John Quayle, whose apiary we are visiting. I hope to see you all there!

Lastly, 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 president@gcabs.net.au if you would like to help!

Right now though... I just need to recover from a dose of Covid-19. Seems after avoiding it until now, it is finally my turn!

Cheers... Colin Allen - President



A warm welcome to our newest members:

*Ken B, Daniel L, Graham R, Irene V,
Michael V*

COMMITTEE MEETINGS

All welcome to attend our online Committee meetings via this link: meet.google.com/fyq-ujco-kth Next meeting on 9th May 6:30 pm.

May Honey Flora - S.E. Queensland

Submitted by Jim O'Regan

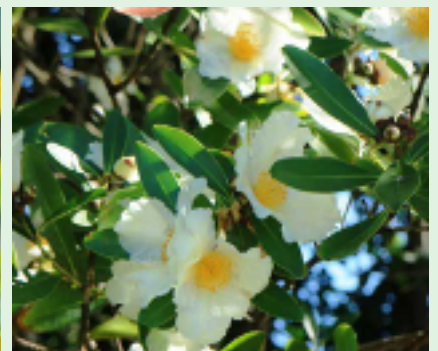
Banksia. Black Sheoak. Broad-leaved Banksia. Flooded Gum. Glycine. Golden Candlesticks. Hickory Wattle. Honeysuckle Oak. Mountain Coolibah. Paper-barked Tea-tree. River Sheoak. Rose Sheoak. Tumble-down Ironbark. White Box.



Golden Candlesticks



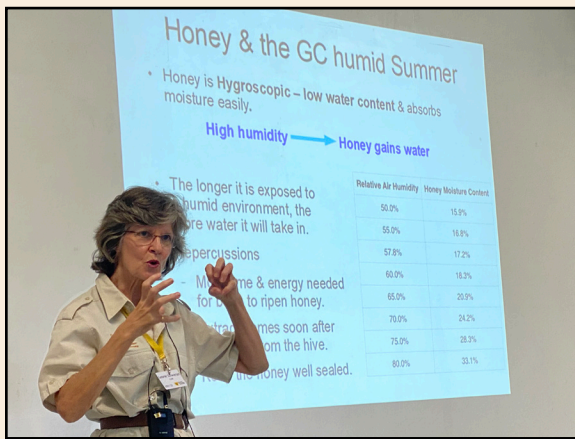
Broad leaf banksia



Gordonia (fried egg flower)

April Member Meeting Review

by Ann Allen



We all enjoyed an excellent presentation by Leonie Schwarzel and co-presenter Fred Flintstone and his time machine which took us on a journey about Honey through history, legend and science. Even the most seasoned and knowledgeable beekeeper would have learnt something new from her very well-researched and fascinating talk. She spoke about how bees make honey - from sucking up the nectar which undergoes subsequent chemical changes

to break it down into components before being deposited into honeycomb. She described the sugar content and how this relates to crystallization. We looked back at honey's role from ancient to modern times – as a food, drink, food preservative, medicine and elixir of youth.

After the talk, snacks and drinks (including some of Leonie's homemade honey mead) accompanied friendly chats to end our morning.



April Beginners Course

Kathy Knox

A group of 6 attended the theory class on Sat. 23rd at GCABS headquarters. Then on Sun. 24th a mixed group of 13 spanning classes from December 2021 to February 2022 and April 2022 joined in for the practical day. Luckily the rain held off & all went well.

Helpers are always welcome for the next class. Stay tuned for details!

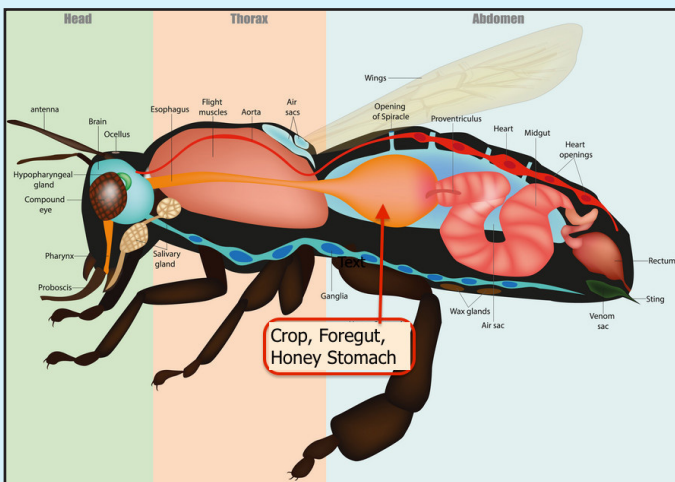
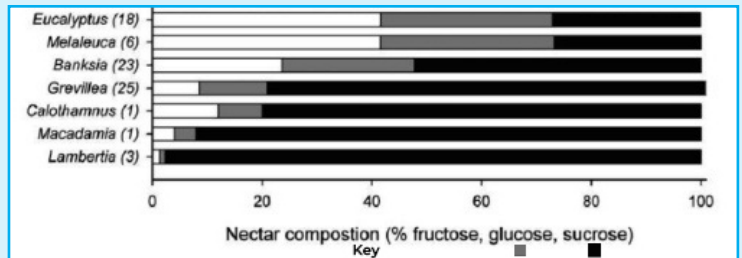


Nectar to Honey Transformation

Compiled from varied sources by the editor, Leonie Schwarzel

To attract pollinators, plants use floral scents, which begin as oils produced by the petals. Once the pollinator arrives, it is rewarded in two ways, by pollen & by the sweet nectar contained within the flower. Yes, nectar in flowers serves chiefly to reward pollinators. It is produced in the nectaries which are usually located at the base of the flower stamens, which draw the pollinators into contact with the pollen to be transferred.

Nectar is basically a sugar solution composed of three sugars: sucrose, glucose and fructose. It is 70-80% water. It also contains small amounts of scent chemicals, vitamins, minerals, amino acids, enzymes, lipids, organic acids & flavour compounds.



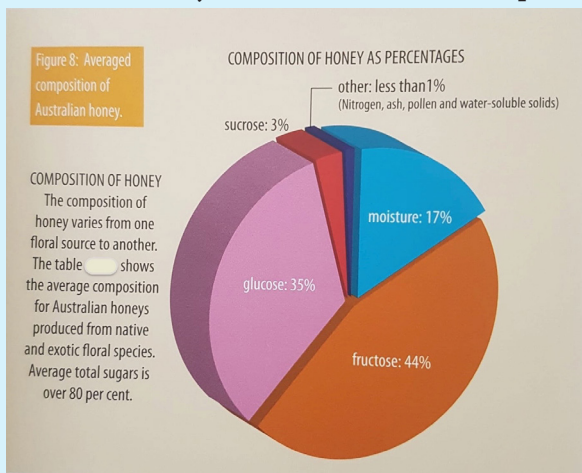
Honeybees suck up the nectar using their hollow, straw-like tongue. From the moment the fluid is within their mouthparts a chemical process begins, which will transform the nectar into honey. The bees do this by adding a range of enzymes, one of which is invertase, produced by the hypopharyngeal gland (the same gland that produces royal jelly in nurse bees). Sucrose is a disaccharide, meaning it is made up of 2 sugars chemically bonded together. The invertase removes the chemical bond resulting in the two simple sugars glucose & fructose, which the bees can readily digest. Another important enzyme in the process is glucose oxidase. Its job is

to convert glucose to become gluconic acid & hydrogen peroxide. The acidity & peroxide components are key to honey's long shelf-life.

The bees swallow & store the nectar in their crop (honey stomach), a pre-chamber to their digestive system. Once back at the hive, they regurgitate the liquid & it is fed bee to bee through the process called trophallaxis. The water content is reduced with each transfer & each bee in turn continues to add enzymes so that the transformation from nectar to honey is a continuous shared process.



Trophallaxis



Once the mixture has become a viscous 'semi liquid' of about 17-18% water content, the bees store it in the honeycomb cells. If the water content is still slightly higher than the required level, the bees fan their wings across the open cells, producing a current of warm air that helps with evaporation. They then cap the cells and the transformation from nectar to honey is complete.

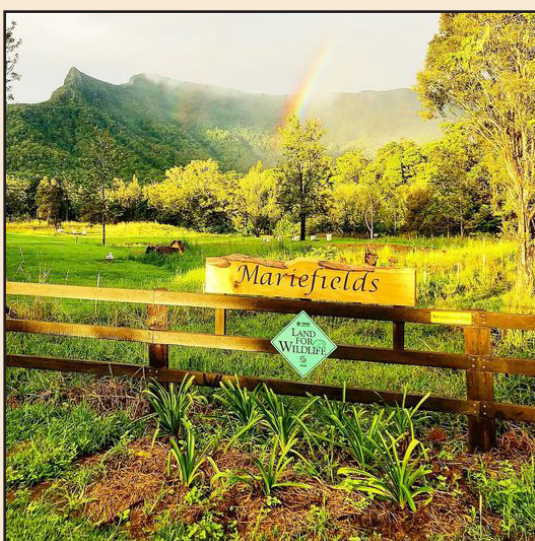
Beekeeper Spotlight: Dr John Quayle

We have featured John in this edition as our May Members meeting will be held at his property at Tyagum. Come along for some hands on hive inspections. Bring your Bee suit & veil.

Veterinary Surgeon and Environmental Lawyer

John became a beekeeper under the guidance of his neighbour who also kept bees at the age of 10 in the backyard of his home at Rainworth in Brisbane. In those days a bee sting or anaphylactic reaction were never a worry. He currently has 11 hives.

He graduated as a Veterinary Surgeon from University of Queensland in 1968 and worked as a Veterinary Surgeon in the UK. On returning to Australia, he opened the Wynnum Manly Veterinary Hospital which today is one of the leading Veterinary Hospitals in Queensland.



His career path changed to environmental protection as a qualified environmental commercial lawyer. Now with over 40 years environmental management experience he develops economic business models based on environmental sustainability that ensure the long-term financial success of livelihood programs for local communities.

John has extensive international business experience in China, Indonesia, Vietnam and the Philippines in the structuring, developing and operation of environmental community-based ventures. His business and multicultural experience play a major role in his ability to negotiate, advise on and deliver domestic and international projects with core environmental issues at the forefront of the programs.

He has negotiated Native Title and Cultural Heritage Agreements with several aboriginal land groups based on sustainability of the environment. He worked closely with an ASX listed Oil and Gas Company and negotiated joint ventures with environmental protection at the forefront.

While living in Indonesia he witnessed firsthand the rainforest devastation. On many occasions while visiting the shipping ports of Macassar, Bulukumba, Semarang and Sunda Kalapa in Jakarta he watched as phinisi cargo boats unloaded full cargoes of rainforest timber that had been illegally cut from rainforests from the far corners of the Indonesian Archipelago.

He founded the Indonesian Rainforest Foundation (IRF) based on sustainability and long-term sustainable income growth for local communities to assist in protection of the Indonesian environment. IRF has implemented dozens of successful projects in Indonesia including large scale reforestation and mangrove planting programs along the coast of Java. IRF is presently engaged in protecting 5000 areas of primary rainforest for the indigenous Dayak Community in Kalimantan.



Several years ago, John was fortunate to be able to purchase Mariefields from the estate of Bill Mollison, the father of permaculture. It was on this property that Bill developed the first permaculture farm in the

world with over 20 dams, swales, contours and associated permaculture accessories.

John has regenerated this 165-acre property with environmental protection at the forefront by developing wildlife corridors, fencing riparian zones along the creeks, protection of native forest areas, planting 4400 koala food trees, native tree planting on bird islands in dams with Mariefields Apiary overlooking the manuka honey leptospermum trees.



In the News

Law allowing honey bees to stay in Queensland's national parks set to pass

By Kallee Buchanan and Jennifer Nichols. April 10th, 2022

It is a controversial debate. Should beekeepers be allowed to continue placing honeybee hives in national parks?

- A Qld state government committee has recommended a bill extending commercial beekeeper access.
- Conservationists argue introduced species should not be allowed in native nature reserves.
- Farmers say creating natural corridors to replace the national parks is not feasible.
- Read the full story [HERE](#).



Thanks to Peter Quirk for making this lovely craft piece displayed at our club house.

Should we call it the "Quirky" Skep?



4th AUSTRALIAN
Bee Congress
CELEBRATING HONEY BEES
At the heart of a healthy Australia



8 - 11 June 2022
Rosehill Gardens, Sydney, NSW

After an extremely challenging few years for beekeepers, it is time to come together to celebrate honey bees, which we all know are at the heart of a healthy Australia! The congress organising committee are striving towards establishing a program that is both educational and empowering. Keep up to date with the event at <https://australianbeecongress.com.au/>

Key Dates:

- Early bird Registration Deadline: Friday 22nd April 2022
- Accommodation Booking Deadline: Friday 6th May 2022
- Registration Closing Date: Tuesday 31st May 2022

Scholarships are available and can be applied for by anyone who is eligible and would appreciate some financial assistance to attend this congress. [Download the application form here.](#)

The 3rd Australian Native Bee Conference

For those interested in native bees as well, the 3rd Australian Native Bee Conference will be held 11-12th June, also at Rosehill Gardens Racecourse, Sydney <https://www.anba.org.au/anba-conference/>

JOBS in Your Bee Yard this Month

Thanks to Paul Fullwood of Greenwood Bees for this info







Drone Eviction – With the cooler weather, you may begin to see drones being evicted from your hives. This is normal behaviour. Autumn is the time to prep for winter. Follow 5 key points:

1. NUTRITION – ensure your bees have PLENTY of honey. In hinterland regions where winters are colder & longer, allow a full box of honey for a large colony. In coastal regions, allow $\frac{3}{4}$ box.
2. COLONY STRENGTH – a weak hive will grow weaker & may not survive winter. If the colony is disease free, combine with a strong colony using the ‘newspaper’ method if you have more than one hive. Note – You will have to remove the queen from the weaker colony before combining.
3. BEE SPACE - Put the maximum numbers of bees into the minimum space. Remove excess supers. Take out, freeze for 24 hours, then store empty frames in a well sealed container & 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. So watch the 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?

Bee Quiz: Is your knowledge A+ or Bee grade?

Answers next page



- How many wings does a bee have?
- How many eyes does a bee have?
a. 6 b. 5 c. 8 d. 12
- How many honey bees could you find in a healthy colony, at its peak?
a. 5,000 to 6,000 bees
b. About 100,000 bees
c. 50,000 to 60,000 bees
d. About 1,000 bees
- Which of these is NOT a real species of bee?
a. The Hairy Footed Flower Bee
b. Common Masked Bee
c. The Black-Kneed Bee
d. Sharp-tailed bee
- At what speed do worker bees fly?
a. About 10 km per hr
b. About 18 km per hr
c. About 22 km per hour
- Bees collect pollen. But to which part of the flower is pollen attached?
a. Stigma
b. Sepals
c. Carpels
d. Anther
- In the act of feeding, honey bees are also communicating with each other. This is known as:
a. trophallaxis
b. anaphylaxis
c. prophylaxis
d. swarming
- How many times per second do bumblebees beat their wings?
a. 100 times per second
b. 200 times per second
c. 500 times per second
d. 1000 times per second
- Stingers evolved from an organ known as what?
a. ovipositor
b. postuthorax
c. spiracle
- How many flowers do honey bees visit per day?
a. 100 b. 500 c. 1000
- How much space do bees like to have between their honeycombs?
a. 3/5 inch b. 3/4 inch c. 3/8 inch d. 5/6 inch
- True or false: Bees have ears.
a. True b. False
- Bee & Ant Puzzle**
 +  = 10
 -  = 8
 ×  = ?



Quiz Answers

1. Four wings: The front and rear wings hook together to form one big pair of wings and unhook for easy folding when not flying. 2. Five eyes: Two large compound eyes and three smaller ocelli eyes in the centre of their head. 3.c 4.c 5.c 6.d The anther produces the male gametophyte, known as pollen. 7.a 8.b 9.a The ovipositor is an organ used by some animals for the laying of eggs. The stings of wasps, hornets, bees, and ants are ovipositors, highly modified and with associated venom glands. 10.c 11. c in 1852 Reverend Lorenzo Langstroth identified the “bee space” ie the crawl space that bees need to pass easily between two structures (3/8 inch is the ideal space). When the space between two surfaces in the hive is the right bee space, the bees will respect the space & leave it open as their passageway. 12.b False 13. bee=1, ant=9 so final equation equals 9.



Queensland Beekeepers' Association Inc.

OPEN DAY



**Saturday 25th
June 2022**

Warwick QLD

Location:
Condamine Apiaries, Wheatvale via Warwick

**Entry gates
open 8.30am**

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

 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

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