THE BUZZ - EDITION 437 SEPTEMBER 2021

THE BUZZ

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





Native and honey bees sharing an onion flower

ABA Membership fees for 2021/2022 are now overdue. If you have already paid, you will have received your membership pack (photo). If you haven't please don't delay. Membership includes additional discounts and special offers.



DATE SAVERS

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.

- Sat/Sun 11th/12th Sept. Beginning in Beekeeping Course. Still a couple of places left. Register via GCABS' website: https://www.gcabs.net.au/events/introtobeekeepingsept2021/
- Sun 19th Sept. 10am-12noon General Meeting. Country Paradise Parklands, 231 Beaudesert-Nerang Rd, Nerang. Bring a chair. Presentation 1 by Elise Turner: Beekeeping First Aid. Presentation 2 by Noah Rush: Beekeeping Fire Safety. You MUST register to attend: https://www.gcabs.net.au/events/member-meeting-880-657-333-653/
- Sat 16 Oct. From 9am Tocal Beekeepers' Field Day - Online See https://www.tocal.nsw.edu.au/newsand-media/tocal-beekeepers-field-day
- Sat 17 Oct. 10am-12noon General Meeting. Country Paradise Parklands. Topic: Hive Maintenance.
- Fri/Sat 5-6 Nov Murwillumbah Show Details at https://murwillumbahshow.com.au/
- **6-14 Nov. Australian Pollinator Week** Details at https://www.australianpollinatorweek.org.au/

From GCABS President



Thank you to those members who embraced the technology and attended the Annual General Meeting online. The AGM is an important event, it gives its members a broad overview of the Association's current direction, financial health and confirms its purpose. It is also the time to revitalise the Association through the official engagement of members into key elected positions.

I would like to welcome Alex Lang, Bradley Murphy and Stephen Huth to the management committee, and farewell Travis Green, Rod Luke and Colin Allen. I would like to share with you some words from our vice president, Rachael Kubinski

that I think are worth repeating.

"It's always hard to find the right words to express one's sadness with the announcement of another's departure, and many times throughout our lifetime, clarity does not avail itself to the reason surrounding the meeting of these individuals. Though there is always a season and time for all, with true reflection exposing the path jointly travelled. With this in mind, I thank you for the gift of our time spent together, navigating the waters of committee life."

Together we have achieved much this last year, and created a strong foundation and clear path for those who will follow. I look forward to once again leading this Association.

Exciting times are on the horizon as we await the completion of the Clubhouse, a truly epic milestone in club history. Along with the ringing in of a new committee year, there's also a fresh look to the much anticipated Monthly Buzz Editions commencing next month, ever so lovingly compiled by the dedicated Editorial Team.

Yours in Beekeeping Ross Krumbholz - President

Annual General Meeting review - 15 August

Due to COVID restrictions our Annual General Meeting was held online. A summary of main events of the past year was given by our president, Ross Krumbholz, in particular the exciting progress on our new clubhouse, followed by an informative financial report from outgoing treasurer Rod Luke which showed our club to be in a healthy and financially viable position.

Our club membership sits at 439 members.

We then heard from beekeeping trainer Kevin Tracy who spoke of the importance of educating ourselves in beekeeping. There are countless high quality resources to help you do this. One that Kevin is currently running through the FTA is a Cert 111 in Beekeeping course for those who wish to take their formal education to far beyond beginner level. https://www.fta.edu.au/course/certificate-iii-in-beekeeping/

Biosecurity officer for Qld, Rebecca Laws spoke to us about learning how to confidently identify and report with pests and diseases. She has a range of very useful webinars available for free at https://beeaware.org.au/archive-news/bee-biosecurity-webinar-recordings-now-available/

NB. Biosecurity Online training BOLT is free at this address https://honeybee.canopihr.com.au/auth/login/?returnUrl=%2F&fbclid=IwAR24bHnCjmG-NiMbTWl9suD8Uogn3JKmzWTj5aYEDnED5PoU5HAUIswr3Oo

In The News

Almond pollination

Australia's largest livestock migrationhas just been completed. Australia's almond industry relies wholly on honey bees for pollination and require around 277,000 hives each season. Billions of honey bees from across the country make the annual pilgrimage to Victoria's almond orchards. Read more at

https://www.farmonline.com.au/story/7356330/billions-of-bees-on-the-move-to-southern-almond-orchards/

Bee venom from angry bees in WA

The venom of angry bees fed on a native West Australian forest diet has been found to be stronger – and with more desirable medicinal properties – than more docile bees.

https://www.abc.net.au/news/rural/2021-08-23/angry-bee-venom-more-valuable-and-allergenic/100399578

National honey library to prove authenticity of Tasmanian leatherwood

Efforts are being made to ensure that fake or diluted honey is more easily spotted.

https://www.abc.net.au/news/2021-08-23/honey-library-to-prove-authenticity-of-tas-manian-leatherwood/100397638?utm_cam-paign=news-article-share-2-desktop-0&utm_content=mail&utm_medium=content_shared&utm_source=abc_news_web





JOBS in Your Bee Yard this month

- Check for pest & diseases keep notes
- Watch for signs of swarm preparation and act to stop your bees swarming including re-queening, providing more space, splitting colonies. See last month's Buzz article on Swarming.
- Begin to cycle out old dark combs and replace with fresh frames & foundation for your bees to draw fresh comb
- Ensure the growing population has sufficient nectar & pollen stores. Don't harvest too early in the season.



A warm welcome to all our newest members:

David A, Edita B, Alexandra C, Carl H, Krystal H, Avril I, Gavin I, Anthony K, Ryan M, Susan Mc, Prudence Mc, Deslyn Mc, Jac N, Frank P, Robert P, Sarah P, Michelle S, Dean S, Katherine T, Autumn U, Brendan W, David W, Ian W, Jason W, Megan W

Drones & Drone Congregation Areas (DCAs) Behind Every Queen is a Drone!

BEE Z NE
APIARIES

by Kevin Tracy "Bee Zone Apiaries"

Well, one Drone at a time and on average around 12. Spare a thought for the queen! Now, let's focus on the Drone.



Drones are important Diversity is important Drones gather in DCAs

Multiple Drones mate with queen

Some general knowledge about Drone bees:

- They are not a caste.
- They take longer to develop than the worker and queen
- They are greater or less in number seasonally
- Their numbers in a colony are variable with nutrition
- A single colony can have as many as 20,000 drones
- Culling drones won't stop Drone production
- Mating takes place in a DCA (Drone Congregation Area)
- They mate with the queen bee
- They die after mating

Drone Congregation Area

A DCA is the area where sexually mature drones congregate and wait for virgin queens. A Drone is sexually mature 12 days post emerging.

For readers who know Gold Coast history: a DCA is kind of like the old Surfers Paradise "Bird Watchers' Bar". Drone Congregation Areas are located at the same place year after year.

There are no obstacles within the DCA, but there would usually be some surrounding it for wind protection and

orientation. Think of something like a sports oval surrounded by trees or a golf course fairway. In optimal weather conditions, Drones in a DCA patrol a zone 100 - 200m wide at an altitude of 5 - 40m. The area gets smaller when weather conditions are less favourable.

When a queen enters a DCA, a swarm of pursuing Drones rapidly forms behind the queen. This activity is referred to as a "drone comet" because of its comet shaped formation. The borders of the DCA are well defined. Upon the queen leaving the defined area, the Drones rapidly cease

pursuit.

Only about 0.5% of drones in the DCA successfully mate with a queen. A queen can go on more than one mating flight over a couple of days but not again. Drones have two types of flight:

- Orientation flights of one to six minutes.
- Mating flights of 32 ± 22 minutes.
- Flight duration is limited by the honey they can stock in their crop.
- Between two mating flights Drones spend an average of 17 minutes feeding inside the hive.





- Drones don't always come back to their "home" colony.
- Normally, peak mating flight activity occurs between 2pm 5pm.

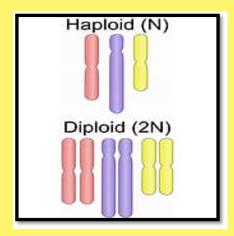
Weather greatly influences the flight activity of Drones. Favourable weather includes a sunny/partly cloudy day, temperature in 19-38°C range, wind under 22 km/h.

What is a Drone?

Some call a Drone a male bee, others call them "flying sperm". For a better understanding – the Drone is the carrier of genetic diversity.

The easiest way to explain the genetics of the Drone is:

The Drone doesn't have a father, only a mother. The Drone does, however, have a grandfather.



More scientifically -

The drone only has half the chromosomes of his "sisters/ half-sisters" because the Drone develops from an unfertilized egg



Honey bees are a haplo-diploid species, in which Drones have haploid cells and workers and queens have diploid cells. The Drones that develop, therefore, share a very similar genetic makeup to their mother.

How much Drone semen does it take for a "good" insemination?

When artificially inseminating a queen, she is given 8-12 μ l harvested semen. Each Drone produces an average 1 μ l semen, requiring at least 8 Drones to make up the minimum volume. Usually, many more Drones are required. A genetically diverse pool of spermatozoa (4–6 million) are permanently

Idealized diagram of chromosomes in cells of bees

Queen

Eggs are fertilized by a male

Female worker

Male drone

stored alive in the spermatheca and used to fertilise eggs.

A couple of thoughts to take away -

Drones are important. For genetic diversity. Genetic Diversity is important. Colonies where queens mated with more Drones perform better in survival, health and productivity. For your consideration – would you rather have a "local" queen bee, one from another environment, or one you raised from your own stock?

What are your thoughts? Email me at kntracy@gmail.com Have a great season and respect your Drones.

The editorial team are very grateful to Kevin for submitting this fascinating and educational article. Kevin's wealth of knowledge is a valued asset for our GCABS members. Thanks Kevin!

Beekeeper Spotlight

This month we are focussing on new members of our 2021-2022 GCABS Committee:

Brad Murphy

Brad brings financial experience to his role as our new GCABS treasurer. He has been a beekeeper for less than 3 years, starting off with 1 flowhive at that time. This has now built up to around 10 hives and 3 nucs which certainly keep him busy, especially last weekend when he experienced 3 swarms in just a few days from the same hive! As a cancer survivor, he finds working with his bees a wonderful form of therapy. His line of work is as a Freight Logistics Co-ordinator. Our thanks go to him for taking on this important role on our committee.



Alex Lang

Arriving on the Gold Coast from his home city of Munich, Alex had already completed a beekeeper training certificate in Germany, but had not actually had his own bees. This changed once he was here when he completed Kathy's intro to beekeeping course and setting up his own hives at his home. As Ass. Prof of Project Management at Bond, he enjoys the scientific/biological aspects of watching bee behaviour, plus using his jars of honey to motivate his students! We look forward to enjoying his fresh approach and good sense of humour as he joins our GCABS committee this year.



John Vallance

Although not a new committee member, our quiet achiever John deserves a special mention. As our hardworking Membership and Biosecurity Officer, he has been offering valuable help and advice to many other beekeepers. Becoming a beekeeper himself only 3 years ago, he has been on a steep learning curve since he started on his journey - attending courses, reading constantly and watching YouTube videos.

He says he loves all aspects of working with bees. Apart from the fresh honey they provide his family, they offer him hands-on experience which he particularly enjoys - inspecting hives, checking



for pests and disease, breeding Queens and swarm collection. As if 12 hives of his own are not enough he is always willing to help others. His advice to newbies is to educate themselves and not be afraid of making mistakes as this is how we learn, through trial and error.

John works as an aircraft maintenance engineer here on the Gold Coast. He was educated and trained in Brisbane, worked overseas in his field, and now lives with his wife and 2 small children in Oxenford. Thank you John for your boundless enthusiasm and kind heart!

Stephen Huth

After watching some local documentaries on bees and attending our GCABS beginner course about three years ago, Stephen decided to enter the world of beekeeping. He has 2 hives at his home where he lives with his wife and two young children. It has turned out to be an enjoyable hobby for him along with his other pastime as a musician (keyboard) and singer.

His main career has been as a senior school teacher and he currently holds a leadership role at a local Lutheran college, LORDS. We welcome him to the committee and look forward to working with him.



Colin Allen

A big thank you to Colin who has stepped down from the committee for this year. He has served on the committee for 3 years, half of those as club secretary. We really appreciate his efficient and reliable contributions over this time. He will continue to help with the layout and production of the Buzz each month, along with helping out at the introduction to beekeeping courses.

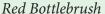


September Honey Flora - S.E. Queensland

Supplied by Jim O'Regan

Black Sheoak, Blue Gum, Brisbane Black Wattle, Brisbane Golden Wattle, Broad-leaved Banksia, Caley's Ironbark, Dogwood, Dusky -leaved Ironbark, Flat Weed, Forest Boronia, Fuzzy Box, Glycine, Golden Candlesticks, Grass Tree, Grey Ironbark, Hairy Bush-pea, Mexican Poppy, Mountain Coolibah, Mugga, Narrow-leaved Grey Gum, Narrow-leaved Ironbark, Orange Tree, Prickly-leaved Paperbark, Red Bottlebrush, River Sheoak, Scribbly Gum, Spotted Gum, Swamp Sheoak, Tallowwood, Tumble-down Ironbark, Turnip Weed, White Bottle-brush, White Clover.







Brisbane Golden Wattle

GCABS at the GC Show - Aug 27-29

It was a busy but fun time at the GC Show this year. With a live bee stand and demos of extracting, frame assembly, wiring and embedding. It was a great effort.

Our heartfelt thanks go especially to Rachael and Vern Kubinski, Ross Krumbholz and Kim DeMezieres for their incredibly hard work in putting it all together.

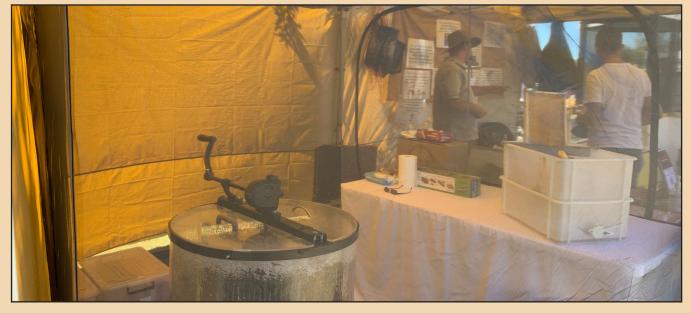
I am sure they have helped to educate more of the public about bees and the requirements involved in being responsible beekeepers.



Congratulations to GCABS members for their well prepared honey comp entries and to those who won prizes, well done!







COMMITTEE

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Library Corner

The August edition of The Australian Beekeeper is here and available for loan. Articles this month include:

- Spring tips for new beekeepers
- Winter swarms
- Bee mating and defensive behaviour
- The future of honey as a health food
- The threat of microplastics
- · CSIRO research on honey origins
- Australia's native cloaked bee rediscovered





How's Your Hardware?

Buy now for Spring: Boxes, bases, lids, frames



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