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





GCABS winners, Best Trade Site and Honey Competition, Mudgeeraba Show 2019

DATE SAVERS

Sun 21st July 10am-Noon General Meeting at Rachael & Vern's, aka V's Bees' home, 25 Shawnee

Cres. Pimpama. Focus: Ceracell Honeycomb System demo. & opening

a hive Bring: Protective wear & morning tea item to share.

Sat 27th-28th July Introductory Beginner Course (2 half days) Registration see pg 6

Mon 5th Aug. 6:30pm Committee Meeting Sun 18th Aug. 10am

AGM at Currumbin Community Special School, 5 Hammersford Dr,

Currumbin Waters. NOMINATIONS for 2019/2020 committee

welcome. See page 3

Fri 2nd Aug. 11:59pm Deadline for Gold Coast Show Honey Competition FORMS See pg 2

Fri 30th Aug – Sun 1st Sept. Gold Coast Show. LOTS of VOLUNTEERS needed See pg 2

General members are welcome at committee meetings. Robina Community Centre, Level 1, 6:30pm

GCABS MOVE TO THE ABA

We have postponed GCABS move to the ABA (Amateur Beekeepers' Association) until December 2019, with new combined GCABS/ABA membership starting January 1st, 2020.

For CURRENT members, your GCABS membership will remain valid until December 31. You will receive an email from the ABA in December inviting you to renew. For NEW members, join for just \$10 special until Dec 31st 2019

From GCABS' President, Kathy Knox

In this, the second to last Buzz newsletter for the current committee, there is much to update. I will give a snapshot with links to more information. Please approach any committee member of GCABS to learn more or express your views.

AHBIC



The Australian Honey Bee Industry Council (AHBIC) is the peak industry body in Australia. AHBIC aims to ensure the long-term economic viability, security and prosperity of the Australian Honey Bee industry. To achieve this mission AHBIC fosters, promotes, enhances and protects the interests of the industry; represents industry policy at all levels of government, private enterprise and the public; promotes, supports, seeks amendments to, or opposes legislation or measures that may affect the industry; and conducts educational, promotional and public relation campaigns. AHBIC and partners are responsible for the Biosecurity Manual for Beekeepers, The Code of Practice, B-Qual and much more. See https://honeybee.org.au/ GCABS are lucky in that this year, we represented the recreational sector on the AHBIC council as a non-voting delegate at the AGM on 28 June in Launceston. At the AGM, the council ratified the amended AHBIC constitution (see https://honeybee.org.au/wp- content/uploads/2015/11/Review-of-constitution-2014-15-V4-full-version.pdf), ensuring the recreational sector (us, the little backyard beeks, who make up 80% of all registered keepers in the country but only hold 7% of the hives) are represented in decision making that concerns the honey bee industry. This may sound like a lot of jargon, but reflects a gain of significant ground for our sector in the industry that we participate in and are supported by. "So what" you may ask? AHBIC help to direct where industry funding is used for biosecurity, research and development. Each of us can make a voluntary contribution to the industry that supports us by becoming a Friend of AHBIC. See https://honeybee.org.au/friends-of-ahbic-voluntary-contribution/



QBA At the state level, beekeeping is represented by the **Q**ueensland **B**eekeepers **A**ssociation (see http://qbabees.org.au/). We can all help contribute to supporting the work QBA does to support our interest by becoming an affiliate member. Membership applications can be made at https://members.qbabees.org.au/.

SHOW SEASON GCABS is everyone's club and the committee are just the people who volunteer to help manage it. Hearty thanks are due to all the volunteers and visitors at the Mudgeeraba Show stall because together we collectively made a great success, winning Best Trade Stall 2019. Thanks to: Steve, Melissa, Matthew and Daniel, Christine & Ivan, Nicky & Jade, Greg & Emily, Isobel & Lyle. Tim & Tanya, Lyza, Jose, Lisa. Peter & Bev Moore, Leonie & Pete, Ross, Wayne, Charlotte, Simon, James. See page 4 for the honey comp results!

Next up is the Gold Coast Show (see https://www.goldcoastshow.com.au/) at the Broadwater Parklands; August 30, 31 to September 1, 2019 and is FREE to attend. Check for details on how to enter the honey comp. Competition schedule HERE. Show entry form HERE. GCABS will supply a volunteer steward to ease the burden on the Show society and ensure our entries are presented in perfect condition. Contact committee if you would like to get involved. ALL WELCOME, IT'S FREE.

Entry form DEADLINE for Gold Coast Show is FRIDAY 2ND AUGUST, 11:59pm

CEDARBROOK PARTNERSHIP

GCABS are moving forward (finally) with our partnership with Carinity at Cedarbrook

residences, on Mudgeeraba Road opposite the showgrounds (see

https://www.carinity.org.au/residential/cedarbrook/). 70% of our apiary are there and we have storage space in the old builders' shed. We are now progressing with our proposal to establish a HQ on site with a building for GCABS, spending our most recent grant money from the State Gov. Gambling Community Benefit Fund. WE WANT YOU! Are you a builder, draftsperson, surveyor, landscaper, electrician, plumber, roofer, etc? Please contact the committee about helping progress our mission to establish a HQ in Mudgeeraba for a training and education base, meeting space and workshop for GCABS to call home

GCABS' Annual General Meeting (AGM) Sunday August 18th

Nominations for committee roles have been encouraging and are still welcome. The committee meet for 1.5 to 2 hours once a month to set plans and pay the bills. No experience necessary; any member is welcome to nominate for a role. All positions are open to nomination & in addition, we seek a Memberships officer, Assistant Secretary, Hive manager, Digital media manager, or ???? What would YOU like to contribute to GCABS?

A nomination form is included at the end of this newsletter (pg.11) or **THROUGH THIS LINK** Nominate who you would like to see on the Committee for 2019 - 2020. The forms must be returned to the Secretary by Sunday August 4th (Email: secretary@gcabs.net.au)

JUNE WRAP: Thanks to Lisa Devereaux for hosting the June GCABS General meeting at her leafy Tallebudgera hinterland property. There were two main areas of discussion: Some of our esteemed "Bee/Honey Brainstrust" held a panel discussion about how to prepare apiary products for show competitions. Thanks to Christine, Alan, Lyle, Olive & Jim for the excellent tips and hints. If you'd like to know more, **follow this link** to Ipswich & West Moreton Bee Club show prep page.



Panel discussion

Kathy discusses chalkbrood

The second focus of the meeting was a CHALKBROOD discussion as it was clearly visible at one of the GCABS' hives,

where the landing board was liberally littered with chalkbrood "mummies" and bee traffic notably less than at the adjacent hive. The infected hive has an old non-vented timber base attached to

the brood box and was in a fairly shaded position. During the last Chalkbrood mummies inspection, a layer of mummies in the bottom of the box was removed but with no opportunity for additional action, the problem has persisted.





CHALKBROOD disease is caused by the fungus *Ascosphaera apis which can kill brood*. The fungus rarely kills entire infected colonies but can weaken them and lead to reduced honey yields and susceptibility to other bee pests and diseases. *See Paul Fullwood's Special Article, pg5*.

JULY 2019

ACTION PLAN The plan moving forward is to transfer the hive to a sunny, well vented location, transfer the colony to a new hive box with vented base board, feed well to stimulate the bees into increased cleaning mode, transfer out the old diseased comb, replace with fresh frames & comb and to requeen in the early spring with a queen bred for good hygenic behaviour. If the colony numbers are small, they will be transferred into a nuc box so they have less space to keep warm. Normally, a smaller colony entering the colder months would be combined with a stronger one to give the best chance of surviving winter. However, since this colony is known to have at least one disease, it will not be combined so as to minimise the chance of infecting any other colony. We'll let our readers know the outcome in a few months time.

MUDGEERABA SHOW As well as winning **Best Trade Stand**, GCABS dominated the honey competition. Hearty congratulations GCABS' members for the quality of your entries! A special congratulations to Alan Betts as Champion Exhibitor and to Daniel Walters as Best Novice.

CLASS	1 st	2 nd	3 rd
1. White	Lyle Read	Alan Betts	
2. Light	Alan Betts	Lyle Read	*
3. Golden	*	Meagan Richards	Summer Blamire
4. Dark	Lyle Read	Alan Betts	Alan Betts
5. Creamed	Alan Betts	Sydney Richards	Angus Turner
6. Comb in Honey	Alan Betts	Angus Turner	Angus Turner
7. Frame of H/comb	Alan Betts		
8. Beeswax block	Alan Betts	Angus Turner	Lyle Read
9. Beeswax Novelty	Angus Turner	Alan Betts	*
10. Granulated Fine	Christine McLachlan	Alan Betts	
11. Granulated Coarse	Alan Betts		
12. Novice	Daniel Walters	*	*
* Non Go	CABS member. Name wi	thheld for confidentia	lity



PAUL'S COLUMN

"CHALK" TALK

Paul Fullwood



Mummies at hive entrance

Yuk, who wants to talk about the ugly side of beekeeping, Pests and Diseases? (P&D)
Unfortunately, pests & diseases outbreaks are part of the life cycle of these highly social creatures.
This article will focus on the disease most relevant at this time of year in our environment: Chalkbrood. Chalkbrood (Ascophaera Apis) is fungal pathogen that like most fungi, thrives in damp, cool conditions. The first sign that a beekeeper often notices are the presence of white and/or dark mummy like larvae expelled from the hive, seen on the landing board, the ground in front of the hive or the base board. These mummies are dead larvae that have been removed by worker bees. Upon close

inspection of the brood frames, these mummies may be seen in the cells of the brood ball, as the workers uncap the infected cells.

The fungal mycelium grows over the larvae, depriving it of nutrition, causing it to dehydrate and harden. The mummy once hardened can actually be used like chalk to streak or mark solid surfaces. In the white mummified state, the disease is not contagious, however when left to blacken, these fruiting bodies containing millions of ripe spores are highly contagious. These spores infect worker bees through contact, who in turn pass it on to nurse bees through trophallaxis (feeding), who then pass it on to larvae when feeding. The spores also remain on the comb of the brood nest and in the hive (especially on the base board).

Because this disease affects brood production, at a time when the hive population is most critical to hive health, it is important to take action as quickly as possible. The cycle of less and less bees being hatched can quickly put the hive in an unbalanced state and lead to other Pests and Diseases taking hold. Now, this is not a reason to panic. This condition can be effectively managed if not left to overrun the hive. Hives with low populations, unable to maintain warmth, in damp areas and unable to supply consistent food resource to the larvae are most affected (e.g. nucleus hives, single box)

In the lead up to Winter, combining a weak hive with a strong hive will resolve the low population issue. During times of damp and cold, ensure the hive is raised off the ground to minimise any rising damp. Reducing the entrance of the hive will also help to minimise temperate and wind affects on the hive. If possible, consider relocating the hive to a warmer, drier location over the winter, or at least adjusting the aspect of the hive in your apiary. Remember, bees prefer FULL SUN.



Feeding sugar syrup

In respect to maintaining sufficient food resource, if the honey stores are depleting, don't be afraid to supplement your bees with sugar syrup. This will give the worker bees an immediate boost in energy, allowing them to generate heat as it metabolises. It also provides a clean, disease free food source that will allow the nurse bees to boost their feeding of the larvae. As well it facilitates hygienic behaviour of the bees, that is the bees now boosted with energy more readily leave the hive for cleansing flights (poops) and work harder to clean out the brood combs from recently emerged adults.

A final management strategy is regular comb replacement. Dark, old combs are heavily infected with toxins (including chalkbrood spores) which can be detrimental to the colonies health if left to reach hazardous levels. A supply of clean dry, drawn comb can be a saviour for a hive that is heavily infected with chalkbrood. Ideally, this can be done as part of



your winter preparations.

Maintaining a strong bee population throughout Winter will minimise the affects of any pathogens that may take root. As a Superorganism, the health and success of your colony relies on strength numbers.

Paul Fullwood

Dark old combs can be heavily infected

Many thanks to Paul who has offered to write several articles on P&D for future Buzz editions

Beekeeping for Beginners Course July 2019: Sat 27th & Sun 28th COST \$125.00



A course over two half days: theory & practical. Suited to the 'curious', the absolute novice, or the beekeeper in their first season with active colonies of bees. Suitable for traditional or alternative honey bee hive designs & Flow hive enthusiasts.

Venue: Labrador Scout Hall. 224 Turpin Rd, Labrador

Click here for further info and to REGISTER.

Helpers welcome. Contribute your knowledge & experience; we value your assistance. Contact your committee if you would like to help: admin@gcabs.net.au

Have YOU joined the GCABS Members' Forum on Facebook



Join up to interact with fellow GCABS members. Share your beekeeping experiences and photos, ask & answer questions, share ideas & innovations or comment on club & other bee related matters. Go to _______, <u>GCABS Members' Forum</u>, hit the *Join* button and answer the screening questions.

We look forward to your input.

In the News

Asian Honey Bees and Varroa in Townsville

Suspect Varroa mites (Varroa jacobsoni) were detected on Asian honey bees at the Port of Townsville in May 2019. Following the first detection of varroa mites on Asian honey bees in Townsville in June 2016, the Department of Agriculture and Fisheries established the National Varroa Mite Eradication Program.

No bees or varroa mites from this first Townsville detection have been found since November 2016. Genetic testing of bee material from the May 2019 detection indicates a new incident, with these Asian honey bees likely to have arrived recently by vessel at the port.

It is important to note that these mites are not Varroa destructor, which is the mite that has spread around the world with devastating consequences for European honey bees. The natural host for V. jacobsoni is the Asian honey bee, and it's thought that this kind of varroa mite does not readily move to European honey bees.

AMHA ALITHORISED

Australian Manuka Credentials Recognised

Manuka honey is well known for its medicinal properties. Australia has over 80 leptospermum plant species, the nectar of which are used by bees to produce this exceptional honey.

Extensive scientific studies have profiled Australian manuka honey to identify the most potent marker, Methylglyoxal (MGO). With levels over 1800 mg/kg of MGO being reported, Australian Manuka is arguably the strongest natural antibacterial honey in the world. In addition, the precursor Dihydryoxyacetone (DHA), and Leptosperin are used as authentication aids.

The Australian Manuka Honey Association (AMHA) has introduced a series of symbols to give customers confidence that they are buying 100% authentic, high quality manuka honey, produced in Australia, that has been independently tested for MGO and DHA markers.





Criteria:

- must be sourced primarily from Leptospermum forests in Australia; and
- contain not less than:
 - 30+ mg/kg Methylglyoxal (MGO); and
 - 60+ mg/kg Dihydryoxyacetone (DHA)
- → Testing required to be conducted by an independent analytical laboratory, authorised by AMHA

Criteria:

- must be sourced solely from Leptospermum forests in Australia; and
- contain not less than 83 mg/kg Methylglyoxal (MGO); and
- greater than 170 mg/kg of Dihydryoxyacetone (DHA)
- → Testing required to be conducted by an independent analytical laboratory, authorised by AMHA.
- → This Mark does not indicate strength of the honey, refer MGO Rating.

These 'Marks of Authenticity' are true marks of authenticity for Australian Manuka honey products and can only be used on products that are registered with the AMHA; and meet the strict verification and testing requirements for each category.

BeEducation Winter Honey Bees & Warming the Hive

Bees can extend their lives when necessary. Winter bees are workers that emerge near the end of the foraging & breeding season. Brood rearing is reduced in autumn in response to decreased pollen sources. The emerging workers tank up on the remaining incoming & stored pollen, and since they have few brood to feed, they store all that good food in their bodies, thus preparing themselves for a long life through the winter. Rather than living six weeks like most of their summertime sisters, winter bees may live six months. These well-nourished, long-lived bees have been called "fat" bees (Sommerville 2005; Mussen 2007).

Thus, the main difference between a winter



bee and any other bee is the presence of enlarged fat bodies in the abdomen.

According to Rosanna Mattingly in Honey-Maker, "the fat body puts together, stores, and breaks down not only fats but also proteins, carbohydrates, and other molecules." Also, fat bodies produce vitellogenin, an amazing substance that allows a nurse bee to secrete brood food even in the absence of fresh pollen.

Vitellogenin is classed as a "glycolipoprotein," meaning that is has properties of sugar (glyco, 2%), fat (lipo,

7%), and protein (91%). Vitellogenin is used by other animals as an egg yolk protein precurser, but bees have made it much more important in their physiology and behavior, using it additionally as a food storage reservoir in their bodies, to synthesize royal jelly & as an immune system enhancer which acts as a "fountain of youth" to prolong lifespan.

Winter bees spend their lives within the nest where they care for the queen, help the colony with temperature regulation, and raise the brood that will inherit the colony in spring. Biologists believe that winter bees evolved as honey bees began to migrate into colder climates. In areas where cool temperatures prevented year-round collection of pollen, honey bee colonies needed a system that could see them through the shortage.

http://scientificbeekeeping.com/fat-bees-part-1/

The Winter Cluster

The winter colony, having lost the last of its short-lived "summer bees," now consists largely of long-lived bees. During the coldest periods, the bees in the colony arrange themselves into a cluster of the optimal size and shape to conserve heat and minimize their consumption of stores.

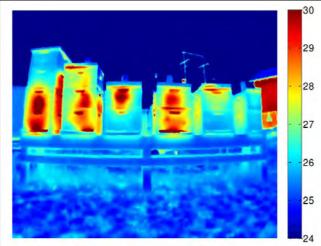
A winter cluster can be thought of as a ball of bees dissected by sheets of honeycomb. Clusters begin to form when the outside air temperature falls to about 14°C. The comb in the very center of the ball contains a small amount of brood and the queen bee. The brood and the queen are kept at the correct temperature by the surrounding workers. The workers have several ways of regulating temperature and air flow throughout the cluster.

Winter cluster



The cluster is not of uniform density. The outermost layers of the cluster form the densest portion, whereas the bees in the core are able to move freely and carry out the regular chores of brood rearing and caring for the queen. Although brood rearing may be almost non-existent in early winter, as the day length increases after the June solstice, so does the amount of brood rearing. When no brood

is present, the core temperature is kept somewhat less than 29°C, but brood needs to be kept warmer—at a constant temperature of about 34°C).



Thermal imaging of winter cluster in hives

To warm the cluster, the workers vibrate their wing muscles—an action which burns calories and gives off heat. The temperature in the brood rearing area is further regulated by the expansion or contraction of the cluster. If the "nursery" becomes too hot, the cluster expands which increases the air flow around each bee and cools the nursery. If the nursery becomes too cold, the cluster contracts which decreases the air flow.

Bees on the exterior surface of the cluster can become so cold that they appear motionless and dead. However, in a way that is not completely understood, these outside bees get pushed towards the center of the cluster by warm bees who then exchange places with them.

Clustered bees need a constant supply of food and, as the winter progresses, the cluster will slowly move toward stored honey. If the cluster loses contact with the stored honey, the bees can quickly starve. Clusters of bees that are too small—that is, they don't have enough bee bodies to maintain adequate nest temperatures—will soon die as well. https://honeybeesuite.com/temperature-regulation-in-a-winter-cluster/

Choose your Hive Location wisely from the start or...

For seasonal weather extremes, consider moving your hives to a cooler spot in summer and sunnier position in winter. For example, step your hive into the shade of a tree in summer and then out into the sun in winter. You can easily move a hive a short distance of no more than 1 metre. Do this day or night; it does not matter. You do not need to close the entrance either. Some bees may initially return

to the old position but, if the hive is less than 1m away, they will find it.
You can take short steps over successive days to move it distances of several metres.

Russ' trolley innovation for stepping a hive up a slope





<u>July Honey Flora – S.E. Queensland</u> Jim O'Reagan



Scribbly gum in flower

Black Sheoak. Blue Gum. Brisbane
Black Wattle. Brisbane Golden
wattle. Broad-leaved Banksia.
Caley's Ironbark. Dusky-leaved
Ironbark. Forest Boronia. Glycine.
Golden Candlesticks. Grey Ironbark.
Mountain Coolibah. Mugga. Paper-barked Tea-tree. River Sheoak.
Scribbly Gum. Spotted Gum. Swamp

Messmate. Tumble-down Ironbark. White Box.

Local Beekeeping Supplies Unit 3, 90 Spencer Rd Nerang 4211



Contact Rachael 0415 192 662 Email <u>vsbeesqld@yahoo.com</u>

> Mon-Fri 8am – 5pm Sat 8:30am – noon



Burnett beekeeping supplies want to buy your CLEANED, YELLOW WAX for \$17/kg direct.

OR will trade for \$20 / kg on the following items:

- FLAT PACK SUPERS OR BROOD BOXES
- FLAT PACK FRAMES
- LID RIMS
- RISERS
- LIFTING CLEATS
- CYPRESS CLEATS
- FOUNDATION

Not available on kits or assembled items.

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Disclaimer – the views and opinions expressed in this newsletter are those of authors and do not necessarily reflect the official policy or position of the GCABS. GCABS accepts no liability for the consequences of any actions taken on the basis of the information provided in this newsletter.

GCABS AGM NOMINATION FORM

Election of Office Bearers and Committee Members 2019 - 2020

Signature of Proposer 1:
Signature of Proposer 1: Signature of Proposer 2: Consent of Candidate (name of nominated candidate) (please print your name) Im willing to take on this role if I am elected to this position at the Annual General Meeting of the
Signature of Proposer 1: Signature of Proposer 2: Consent of Candidate
Signature of Proposer 1:
Signature of Proposer 1:
ubmit the named candidate for the above marked position in the management committee.
[PRINT names here - must be current financial GCABS Inc members]
Ve, and
IOMINATED CANDIDATE'S NAME :
c (other) σ Member of Committee
Buzz Editor
Equipment Officer
Treasurer
Secretary
Vice President
POSITION please tick desired position] resident