


# THE BUZZ



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



***“Bees are like oxygen: ubiquitous, essential, and, for the most part, unseen. While we might overlook them, they lie at the heart of relationships that bind the human and natural worlds”.***  
**Thor Hanson**

## DATE SAVERS

Regular meetings resume from July. Check the GCABS & GCABS Members' Forum Facebook pages for updates.

- June 17th Wed. 7-9pm Mentor Training Induction Meeting. See details Page 4
- July 4th & 5th Sat/Sun Beginning in Beekeeping Course. For details & registration see page 3
- July 6th Mon. 6:30pm Committee meeting online via Zoom
- July 19th Sun. 10am-12 General Meeting Venue: The Barn, Nerang Country Paradise Parklands, 231 Beaudesert Nerang Rd, Nerang. See map pg 11  
 Guest Speaker: Corinne Jordan, the [Bee Lady Apiaries](#)  
 Topic: Your Apiary in July & what to prepare for next.
- Aug. 16th Sun. 10am Annual General Meeting (AGM): Please nominate, attend & vote for your 2020-21 GCABS committee. See page 2 for more details.  
 Nomination form on page 11.  
 Venue: The Barn, Nerang Country Paradise Parklands, 231 Beaudesert Nerang Rd, Nerang.

Register for online Biosecurity Talks by Qld Biosecurity officer Rebecca Laws.  
 Click on the link below to register...

9 June – [Brood diseases](#)

23 June – [Mites and external bee parasites](#)

7 July – [How to submit samples for disease testing](#)

21 July – [How to comply with the Australian Honey Bee Industry Biosecurity Code of Practice](#)

## President's Report



*I've been reflecting on what it means to be involved with GCABS and it took a visit with our members to find the answer. Kathy & I were fortunate to spend some time with two of our members, Bev & Peter in beautiful Tallebudgera. They put out a call for assistance a few weeks ago, as they needed some help with their hives. While this is not out of the ordinary for us, the visit left us both overflowing with gratitude for our members. Not only was it wonderful to visit Bev & Peter's property, but we had the opportunity to connect with them both over a cuppa afterwards and enjoyed a delicious morning tea while sharing our thoughts on bees and the world. This is what it means to be a part of community. Clubs are about relationship building and connection; an opportunity to join forces with like-minded people and do great things.*

*With our Mentor training just around the corner (17 June) consider this as an opportunity to connect and support members, new and old. It truly is a rewarding experience and Kathy is currently taking applications for Mentors. Please connect with her if this interests you (See back page for her contact details).*

*Finally a reminder to keep an eye on your bees over winter. It's been a tough season this year and they will likely need some extra support. Be particularly mindful of disease. During a quick pre-winter inspection of a club hive last week, Lisa & I made the unfortunate discovery of American Foul Brood (AFB) which necessitated the destruction of this hive. Not something I wish to do again anytime soon, but it's a reminder that regular pest & disease inspections are so important to minimise the spread and impact our neighbouring beekeepers.*

**Travis Green**  
**President**

## Your Club Needs YOU for the 2020-21 GCABS' committee

A number of key positions: President, Vice President, Secretary, committee member are available and must be filled at the August 16th AGM for the 2020-2021 GCABS committee.

***Nominations are now 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.

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

Print the nomination form on page 11. Complete your nomination and return the form as soon as possible. Contact a current committee member to return your form - contact details are on the back page.



## May Honey Flora - S.E. Queensland

Submitted by Jim O'Reagan



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

Swamp Messmate also known as swamp mahogany

## Beekeeping for Beginners Course

Sat 4th & Sun 5th July, 9am-1pm

\$165.00 Course + GCABS membership

\$110.00 Existing GCABS' member

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: Saturday: Labrador Scout Group Den  
224 Turpin Rd, Labrador.

[Click here for further info and to REGISTER.](#)



## Thankyou Helder, GCABS Secretary – We'll miss you.



Regretfully for us all, Helder Fernandes resigned his position as GCABS secretary at the June committee meeting, citing time constraints and personal reasons. Helder is a powerhouse of energy, skills & friendliness, whom we will miss dearly.

Helder's commitment to GCABS began at the 2018 botanical bazaar as a volunteer. Within a short time he was contributing in all directions: Helder brought a level of professional presentation and digital presence to our club, bringing us up to speed with google systems. He was super helpful & pro-active with graphic design. He helped run beginner courses & recorded many GCABS events with his wonderful photography. He also coordinated much of the 2019 open day event, our biggest ever.

Helder was also very "hands on" at the club apiary, lawn slashing, monitoring the hives, collecting & extracting honey & when going to meetings, he could fit an unusually large amount of gear into his little car! In addition, Helder served the community by collecting swarms across the Coast.

Helder, a huge thank you for ALL you have given to our club. We will miss you, your energy and your grand ideas for taking the club forward. Thank you Brother !



## Seeking MENTORS

Are you the kind of Beek who helps out your friends and neighbours with their hive?

GCABS are preparing a MENTOR PROGRAM to connect new beeks with the likes of you: the more experienced (minimum 2 years), kind, generous hearted & happy to chat folks who willingly answer Beek questions & share advice.

If this sounds like you, please let us know by emailing Kathy at [goldcoast.education@beekeepers.asn.au](mailto:goldcoast.education@beekeepers.asn.au) or join the zoom seminar on June 17th at 7pm via this [LINK](#), Zoom Meeting ID: 868 5445 1697 or call Kathy Knox. Phone number in the committee list on the back page.



## NEWS ALERT - VARROA JACOBSONI ON ASIAN BEES IN TOWNSVILLE



**Australian Honey Bee  
INDUSTRY COUNCIL**

- On 16 and 23 April 2020 the wings of Asian bees were found in the pellets (excretion) from rainbow bee eater birds in the port area of Townsville. This was part of the routine collection under the National Varroa Mite Eradication Program.
- On 28 April 2020 a nest of Asian bees was found in the port area at Townsville.
- Subsequent DNA determination has shown that it is a new incursion and not related to any other Asian bees previously detected in Queensland.
- The nest was estimated at between 2 and 3 months old. There were 2,850 bees, no drones or drone comb and Varroa mites.
- Formal identification of the mites has been undertaken by CSIRO in Canberra and the Department of Agriculture and Fisheries Plant Biosecurity Laboratory in Brisbane and *V. jacobsoni* confirmed.
- Testing for slow paralysis virus and deformed wing virus by CSIRO in Canberra gave negative results.
- Continuing surveillance has not shown any more bee wings in bee eater pellets or Asian bees.
- The Consultative Committee on Emergency Plant Pests (CCEPP) has meet to consider the incursion and has agreed it is feasible to eradicate. Queensland Department of Agriculture and Fisheries are modifying the current Response Plan for approval by the National Management Group (NMG).
- From our industry's perspective it is good it was found so soon. There is no evidence that it has swarmed and it is at the port area where the previous nests have been found.

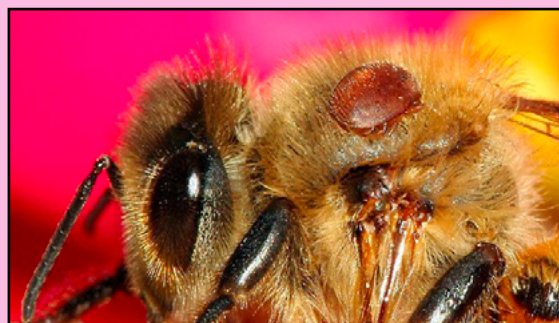
We thank the staff at Townsville for their swift actions in detecting this nest.

*Trevor Weatherhead AM*

*Chair, AHBIC Quarantine and Disease Committee*

## DON'T PANIC...YET

This incursion is about *apis cerana* & *Varroa Jacobsoni* incursion, not *Varroa Destructor*. *V. Jacobsoni* does not affect *Apis Mellifera*, the European honeybee that we keep.



*Mite on bee thorax*

# Meet the Neighbours: Asian Bees

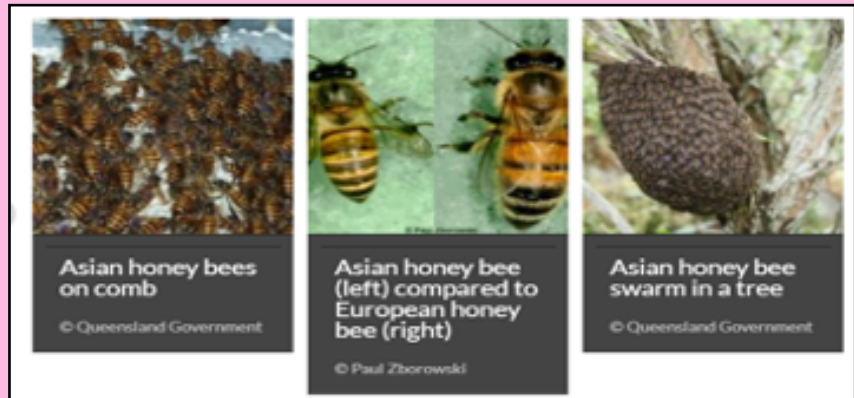
In response to AHBIC recent announcement regarding interception of a nest of Asian bees in Townsville, GCABS committee have compiled the following information from sources published by AHBIC, B-QUAL and DAF.

AHBIC reported that on 28 April 2020 a nest of Asian bees was found in the port area at Townsville. There were 2,850 bees in this nest and Varroa mites were present. Formal identification of the mites undertaken by CSIRO in Canberra and the Department of Agriculture and Fisheries Plant Biosecurity Laboratory in Brisbane confirmed that the mites were *V. jacobsoni*. (see <https://honeybee.org.au/varroa-jacobsoni-on-asian-bees-in-townsville/>).

## Which bee is that?

There are three main species of Asian honeybees: *Apis cerana* (common name, the Asian honey bee); *A. dorsata* (common name, the giant honey bee) and *A. florea* (common name, the dwarf honey bee).

The Asian bees species are a tropic species of honey bee and are closely related to the European honey bee (*Apis mellifera*) which we keep and use for recreational and commercial purposes in Australia. *Apis cerana* occurs naturally across south and southeastern Asia up to Russia in the north. Its natural distribution extends to Japan and stretches as far west as Afghanistan. *Apis cerana* has expanded beyond its native range and there is national concern about its spread into Australia. The Asian species of bee are thought to be likely to arrive in Australian ports on sea cargo, air cargo, or passenger flights from nearby tropics such as Papua New Guinea. *Apis cerana* was introduced intentionally into Papua New Guinea in the late 1970s.

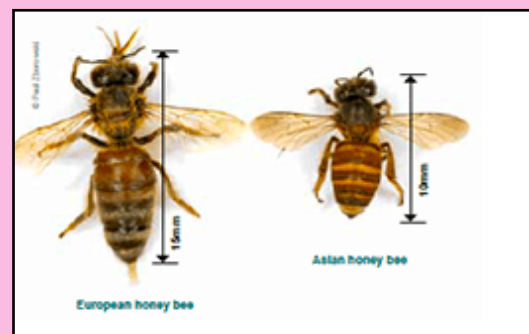


## Identifying Asian honeybees

Asian honeybees (*Apis cerana*) can be easily confused with common European honey bees (*Apis mellifera*), and some other bees and insects. It is smaller and has less hair than the European honeybee, and has pronounced black/brown and yellow stripes.

### Description

- Bee approximately 10mm long.
- Body is smaller and less hairy than that of *Apis mellifera*, European honeybee.
- Abdomen has pronounced black/brown and yellow stripes.



### Habitat

- Found nesting in tree hollows, under eaves, in walls, under floorboards, and in letterboxes, cable reels, compost bins, and various other urban locations.
- Asian honeybees that have been detected in North Queensland have relatively small colonies of up to 5,000 bees.

### Behaviour

- The Asian bee species exhibit behavioural traits that make them unsuited to commercial management.

- Produce up to 20 swarms per year.
- *A. dorsata* swarms are reported to be capable of migrating over several hundred kilometres.
- *Apis cerana* has several unique responses to disturbances including: fast and sudden lateral body shaking of workers, the production of a hissing sound, and heat balling. *Apis cerana* does not use propolis to seal cracks and holes in their hives, as does *Apis mellifera*.
- When fanning to circulate air at the colony entrance, *Apis cerana* workers face the opposite direction that *Apis mellifera* workers face when performing the same task. *Apis mellifera* workers face the hive entrance, but *Apis cerana* workers face away from the colony entrance.

### What's the threat?

It is possible for Asian bee species to carry and transmit exotic disease and pests to other bee species if deliberately introduced to Australia. Introduction of the above species and the parasites (including *V. jacobsoni*) and diseases (such as Deformed Wing Virus) potentially present in their colonies is a major source of concern and threat to biosecurity of the honeybee industry, commercial & recreational in Australia. These species could also compete for food and nesting sites with Australian native bee species and with *A. mellifera*. The drone (male bee) of the *A. cerana* species is capable of mating with the queen of *A. mellifera*, producing non-viable offspring.

*Apis cerana* were first detected in Queensland in Portsmith, Cairns in 2007. The Australian government has begun educational programs to teach the identification of *Apis cerana*, and destruction of identified wild nests is common practice in efforts to cease its spread within the country. However, the success of these programs has been limited and *Apis cerana* seems to be well established in tropical and subtropical Queensland. Asian honey bees are now widespread in areas north of Tully (QLD) and reporting and control in these areas is not compulsory.



*Asian honey bee (A. cerana)*

If you have seen a suspect Asian honey bee swarm or nest outside of Far North Queensland, please upload a picture using the [online reporting form](#). [Report sightings](#) of Asian honey bees or feral bee nests in Townsville to 13 25 23.

## Research & In the News

### Spider venom could lead to bee-friendly pesticides

The world's biggest collection of arachnid venoms will be used to help find pesticides that don't harm bees, in new research at USC Australia. Caterpillars are a big problem in agriculture, as they can consume a lot of plant matter in a short period of time.



The research goal will be to find and isolate the toxin that has a desired effect such as paralysis or death in caterpillars that eat the crops, while not affecting the bees that pollinate them. Read the full story:

<https://www.miragenews.com/spider-venom-could-lead-to-bee-friendly-pesticides/>



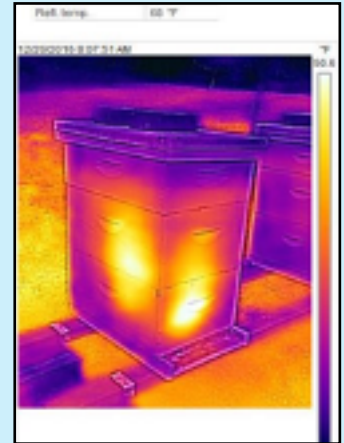
# Winter Beekeeping: Thermal Imaging

*Adapted by the editor with excerpts from the original by Rusty Burlew*

With our moderate Gold Coast climate, many winter days can be warm enough to make a brief hive inspection, mostly to ensure that the colony still has adequate stores of feed to last them through to the first Spring nectar flow. But for our southern cousins & for beekeepers in very cold climates, thermal imaging can offer a useful & instructive alternative to an invasive open hive inspection, where heat is rapidly lost & bee survival can thereby be endangered.

In summertime, bees are scattered throughout the hive, busy with making honey and feeding the young. But in the winter, they gather together in a tight knot called a “cluster” to stay warm. This cluster shows up as a hotspot that can be seen from outside the hive using a thermal camera.

The bee cluster at a moderate 20 deg C ambient temperature is clearly visible at the bottom of the hive.



*Photo: Rusty Burlew.*

Where a colony is strong in numbers, most Gold Coast beekeepers leave a full super of honey stores on the hive through winter, with the queen excluder remaining in place between the brood box & the super above. This limits the movement of the winter cluster, since the queen is only able to move upward to the underside of the excluder. The workers then gather around her, forming the cluster both below and above the excluder. In contrast, where winters are severe, beekeepers generally remove the excluder; the bees start at the bottom of the hive and eat their way up through their honey stores. When they reach the top, it means they're out of food.

A winter thermal image revealed that the cluster had moved to the very top of the hive, indicating that their winter stores were virtually exhausted. The beekeeper saved them from starvation by giving emergency feed - sugar water, to keep them going until spring. It is recommended to monitor hives regularly with the thermal camera.



*Starving hive - cluster at top*

“If you are worried about the size of the colony or its movement, you can track it all winter without ever opening the hive,” Burlew says. “You can tell if it’s moving, growing, shrinking, disappearing.”

Does the Future of Beekeeping Include Thermal? Rusty Burlew thinks so. “I think there definitely is a future in this. It’s helped me tremendously,” she says. “There’s no one piece of equipment that for the money will give you as much information.”

Rusty Burlew maintains the website Honey Bee Suite.



*A warm welcome to our newbee members  
who joined GCABS in May:*

*Vince  
David  
Alexandra  
Adi*

# Beginner Beekeeper AFB Experience

By Lisa Devereaux, GCABS Vice President

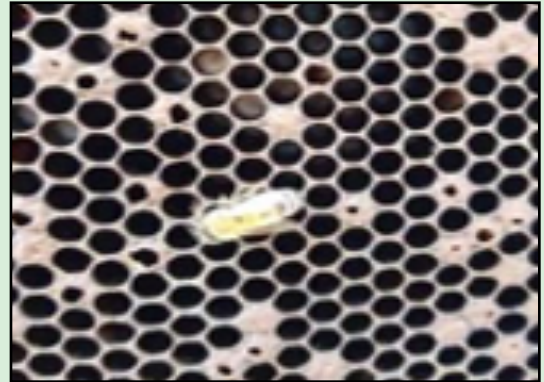
Recently, Travis (President) and I planned to pack down two club's hives for Winter. The hives had been inspected regularly and used for training for beginner beekeeping courses. The first hive we opened was healthy including some really full brood frames. We took one super off for storage.

In the brood box of the second hive, we realised that something was wrong. As a new beekeeper, I have seen hive beetle, chalkbrood and wax moth but never a suspected case of American Foul Brood (AFB). This brood was very scattered on the frame with some dark cells and cappings with holes.

We picked up a small stick to do a quick ropiness test, in which you insert a small stick into the suspect lava cell and the tissue of infected larva will draw out as a fine thread. We also quickly cut a sample of brood comb into a container and put the hive back together to reduce the risk of robbing by other hives.

V's Bees tested the sample using a home AFB test kit that they sell. These kits are handy to have as they are a quick and easy way to check. Unfortunately we had a positive! We also sent the sample to Biosecurity Queensland. We needed to euthanise the hive immediately. As a newbie beekeeper this is a particularly sad action but an essential one as I have other hives on the apiary and needed to isolate the risk as fast as possible.

So as soon as night fell, I sealed up the hive and sadly doused a cup of petrol inside the hive for a burn in the morning. We dug a deep hole to capture the melted wax and honey and moved the hive for the burn. All the equipment including gloves, brush and tools were also included in the burn. AFB has highly persistent spores, is highly contagious and there is no cure. We will further check the other hives in a few weeks and fingers crossed we have responded quickly and no other hives are infected.



*AFB frame showing spotty, laying pattern and perforated cappings*



*Hive destroyed*

## About AFB

American Foulbrood is an infectious and highly contagious disease caused by a spore-forming bacterium, *Paenibacillus larvae*. AFB is found all around the world. It is most easily spread by use of second-hand equipment or by bees robbing spore-laden honey from infected hives. There are three reasons why this disease is so serious:

1. AFB has a highly persistent spore form that can remain infectious for decades and spread easily to other colonies.
2. AFB can devastate an otherwise healthy hive. It does not require another stressor, and colonies do not spontaneously recover – AFB generally leads to death.
3. It is highly infectious – only a few spores are needed to cause infection in an otherwise healthy colony.

<https://pollinators.msu.edu/resources/beekeepers/diagnosing-and-treating-american-foulbrood-in-honey-bee-colonies/>

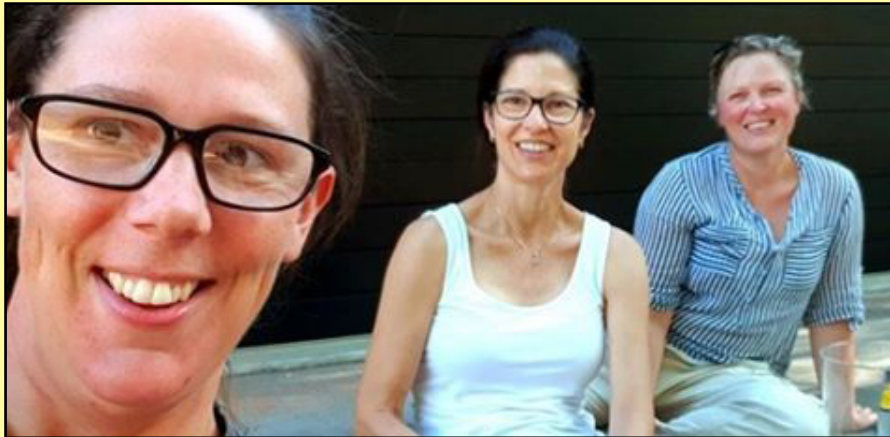
<https://www.daf.qld.gov.au/business-priorities/biosecurity/animal-biosecurity-welfare/animal-health-pests-diseases/beekeeping-in-queensland/diseases-and-pests/american-foulbrood>



# A Generous Donation – Thankyou Shelley

By Kathy Knox

GCABS received a donation of four working beehives from Shelley F., a member of Australian Women in Beekeeping. Shelley reluctantly needed to rehome her bee farm from Burbank (moving & personal reasons), so she reached out to the broader bee community through a mutual friend and Bee Ambassador, Kate Bee (see When Bee Foundation ambassador program, AWIB on facebook). Shelley initially hoped to make her donation to a beekeeper affected by fires over the 2019-2020 summer, but GCABS turned out to be in the right place at the right time given that our club apiary was flooded on 18 Jan 2020 and our colonies are struggling through Autumn and have dwindled despite the GCABS teams' best efforts, care and attention. FYI: Flooded frames and wet boxes do not recover well!



*Kathy Knox with donator Shelley and new GCABS member Alexandra*

The hives are all hybrid Flow systems, where some Langstroth wax combs sit either side of some Flow frames in a modified honey super, and the honey can be harvested both by crush and strain (wax comb) and by Flow tap (Flow frames). Shelley is quite the craftperson having built, modified, and perfected the hive materials in her home workshop. Shelley raised the queens and colonies, with each family bearing a meaningful name and a detailed pedigree: WEATHERBEE (always very calm), BETTY (great layer despite age, good temperament), SHELLBEE (usually calm, not a prolific layer) and ELLBEE. Meticulous records have been kept. Each individual hive is its own barrier group and materials have been cared for with utmost attention to hygiene and cleanliness. There is a lot we can learn from these hives and Shelley has set a high standard in record keeping and maintenance.

With GCABS assistance, Shelley's beautiful bee farm was carefully relocated to Chirn Park on the Gold Coast where they will winter in the sunshine in a caretaker's backyard. The hives are doing well and are bringing joy to their caretaker.

Going forward, it is the intention of GCABS committee to honour the existing arrangements that Shelley had in place with Hanworth House in Brisbane. Excess Honey from the Burbank bee farm was sold through Hanworth House with proceeds supporting good causes.

Stay tuned for updates come spring harvest time. GCABS are proud to be able to support Shelley, the Burbank Bee Farm, and Hanworth House, and we look forward to being able to enjoy the bees and hive materials as an exemplary teaching resource and outstanding example of how our backyard hobby can bring delight and support to so many people in so many ways.



# OUCH!

## What to do when your beekeeping plan goes pear-shaped

*Thanks to Kathy Knox for this article & to John & Kathy for the difficult rescue.*

Unlike some animals, bees cannot be bought at the pet shop, then if things do not go to plan, cannot be dropped off at the shelter. Recently a GCABS member was having trouble managing a “hot hive”; you know, the kind of bees who will follow you inside & chase you down the road!

The hive was one brood box and one super, with flow frames & a peaked lid, built up from a peaceful nuc: Productive, but highly protective, no longer fun.



Toward the end of a hot dry summer, the bees' behaviour was so mean that the owner was desperate. They contacted GCABS to remove the hive. How bad could it be, you ask ???

GCABS member John Emery of Pacific Pines and committee member Kathy Knox answered the call for help & ventured out to bring the hive away for further investigation / re-queening. After somehow getting the hundreds of guard bees inside the entrance with loads of smoke, we sealed them up with closures & tape and managed to get the hive onto a hand truck and up a steep slope into the back of the 4WD. But wait: the peaked lid vents were unsealed ! More tape .... And finally safely in the car.

Picture two sweaty beekeepers, in full PPE, dancing wildly in the setting sunlight as they smacked attacking bees, swatting their heads and brushing bees off each other! Oh dear.

Unloading the bees at the other end was not so eventful and they settled in at Pacific Pines for further investigation.

Kathy returned after some weeks to find John out mowing the lawn. Wandering into the bee yard quietly, she carefully removed the viewing window from the side of the rescued hive's super, just to have a little look, and BANG! Attacked!! Five or ten stings on the hand and chased away. John also got hit and that was the end of the lawn mowing for the day.

An hour later, after antihistamines, ice, a short rest and a trip back home to get the proper protective gear, fully suited up in heavy gear and double gloves, they stripped down the rescued hive in search of the Queen. The colony was strong, feisty, with no sign of disease. After searching twenty frames twice each the culprit was located on the base board. QUICK! Queen into a nuc box, brood and food to accompany her & the rest back together again in standard Langstroth materials so the rescued hive components could be renovated.

.... Months later we can now report the queen and nuc are doing well at a custodian address near the beach. The rescued hive bodies and pieces await a club meeting for dissection and renovation.

### **The MORAL of the STORY: CALL FOR HELP or REMOVAL**

When beekeeping becomes less than fun OR the bees get aggressive OR the beekeeper is unable for whatever reasons to carry on, PLEASE contact your club or society. GCABS exist for the purpose of making sure the members get the most enjoyment from their hobby, while protecting the bees and the community around us. We help and support each other. There is no vet to call, no shelter to take the hive to, and no better way to learn than being a member of your local club.

## Nerang Country Paradise Map

The Barn is the venue for GCABS July & August meetings



## GCABS AGM NOMINATION FORM

*Election of Office Bearers and Committee Members 2020 - 2021*

### POSITION

*[please tick desired position]*

- President
- Vice President
- Secretary
- Treasurer
- Equipment Officer
- Buzz Editor
- Member of Committee

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: \_\_\_\_\_



## COMMITTEE

President	Travis Green	0418 450 465	goldcoast.president@beekeepers.asn.au
Vice-president	Lisa Devereaux	0404 053 231	goldcoast.vp@beekeepers.asn.au
Secretary	Colin Allen	0414 596 096	goldcoast.secretary@beekeepers.asn.au
Treasurer	Ross Krumbholz	0412 974 468	goldcoast.treasurer@beekeepers.asn.au
Buzz Editor	Leonie Schwarzel	0428 177 450	goldcoast.editor@beekeepers.asn.au
Asst Editor/Librarian	Ann Allen	0402 996 101	librarian@gcabs.net.au
Committee	Kathy Knox		admin@gcabs.net.au
	Stephen Walters	0411 658 300	stevezmail@me.com
	Melissa Walters		admin@gcabs.net.au
	Tiffane Upton		admin@gcabs.net.au
	Memberships	Rachael Kubinski	0415 192 662
Extractor Hire	Warrick Fraser	0458 030 725	
Extractor Hire	Rachael Kubinski	0415 192 662	V's Bees, 3/90 Spencer Rd, Nerang
Spinner Hire			

### Need to Feed Your Bees for winter?

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



[www.vsbees.com.au](http://www.vsbees.com.au)



Monday - Friday [ 8am - 5pm ]  
Saturday [ 8.30am - 12pm ]

### Beekeeping Supplies

Unit 3 / 90 Spencer Road  
Nerang  
Located Inside  
Allied Bearings & Seals



0415 192 662  
vsbeesqld@yahoo.com



**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.