

THE BUZZ



Issue No 383 February 2016

The official newsletter of the Gold Coast Amateur Beekeeper Society Inc.

February Newsletter 2016

Next Meeting Sunday 21 February

Venue: The Currumbin Community Special School.
5 Hammersford Drive, Currumbin Valley. From the Pacific Motorway take exit 95 into Stewart Rd, continue along Stewart Rd turning left into Currumbin Creek Rd, then 1st left onto Villiers Rd, then 1st right onto Hammersford Drive.

Program: Meet and greet over a cuppa: 10.00a.m

Meeting Starts: 10.30a.m. BBQ: 12.00pm

Please bring a small salad to share with the BBQ and raffle prizes gratefully accepted.



Presidential Prattle

What a way to start the year, in early January a club member noticed some vandalised hives in an apiary near where she swims her dogs in a local creek, the hives were over 30 years old and belonged to a former club member who is now in his late eighties. After tracking down the owner we met on site to assess the hives, 7 out of 20 were active, with the remainder either slimed out by Small hive beetle or empty. The old gentleman said that he was not able to maintain the hives and on behalf of the club I offered to contact the Gold Coast City Council and Tallebudgera Rural Fire Service to assist with the co-ordination and cleanup of the site. On Tuesday 12th of January at 10am representatives from the Club, GCCC and RFS met on site to assess the situation, with Rob Pollock, Wayne Mole, Denise Beets and new member Tanya Chilcott suited up carrying out the inspection of all hives, the result was not pretty, all active hives were contaminated by AFB, SHB and chalk brood, with many other hives slimed out by SHB.

The decision was made immediately to bag in heavy duty plastic bags the slimed out and non-active hives and to place them in a cleared area for incineration, the active hives were to be closed down after dark by club members and euthanised by council pest control experts. The Tallebudgera RFS then took over the task and incinerated the contaminated hives, a BBQ that lasted until after midnight with the GCCC returning the next morning to fog the stray bees and ashes before having the remains buried by an excavator that night. The support that was received from both the GCCC and RFS was excellent and the club has now established a great working relationship with these 2 groups.

After 3 hours of solid work in very hot conditions, the volunteers needed a lunch break so while I went and obtained some cold drinks and sandwiches they moved some 100 metres away and removed their bee suits and other protective clothing to cool down, upon returning a little later on I found Tanya running down to the water's edge and splashing herself to get rid the feral bees that were giving her a hard time, she received 4 stings, 2 to the shoulders and 2 to the back of her legs. On her rejoining the crew for lunch we all joked that it was her initiation to the club, but within minute's hives and rashes appeared all over her body, her eyes puffed up and lips looked like she had just finished an appointment with a Botox specialist. Tanya's voice became very raspy and airways started swelling.

Within 3 minutes we had arrived at the Burleigh Ambulance Station where she was being treated by paramedics, who gave her an immediate adrenalin injection and commenced a full range of tests before transporting Tanya to Robina Hospital for further treatment and observation. She was released 6 hours later after receiving a script for an epipen that she now carries with her.

Where was she 4 days later? Helping Rob take 60 kg of honey from my hives whilst I am in hospital recovering from a bit more neck/spinal surgery

Presidential Prattle continued.

Tanya may only be a small lady but she definitely has what it takes to be a beekeeper.



These unloved hives raise the questions, how many neglected or abandoned hives

are within a bee's flight of your apiaries? What diseases are they harbouring and more importantly, What can you, as a beekeeper and club member, and the club as a whole do to help eradicate neglected hives?. Club members need to be on the lookout for areas around their apiary location to find these unloved hives and report them to the club via the president and committee so that we can contact DAFF / GCCC / RFS to organise an inspection of that site, then if necessary, contact members who have hives within 8 kilometers of that site. The person who owned the Tallebudgera site also has 5 hives at home in Coolangatta, uses no form of barrier control, and uses the same equipment on both sites, so therefore the possibility of the second apiary site being contaminated with AFB are extremely high. We have passed information of this site to DAFF for their action.

Members need to be up front when faced with a AFB contaminated hive, the club equipment officer John de Boer has AFB test kits in stock that will give you a result within 10 minutes,

Following the kerfuffle on the 21 November 2015 meeting regarding the letter received from Kevin Tracy regarding his suggestions and ideas for running the club, a subcommittee was formed to consider all aspects mentioned. Copies of the correspondence were mailed/emailed out to all members in December to seek their comments, as per the motion passed at that meeting. The subcommittee were asked to report back to me in writing by the 27th of January 2016 with their results so that these results could be forwarded to committee members to consider prior to the first committee meeting of the year to be held on Tuesday 2nd of February 2016.

At 4:27pm on the day the report was due an email was circulated to all committee members stating that "the subcommittee has finalised its report for you" and inviting the committee members to a presentation of the report at the Robina Library Meeting Rooms at 2:00pm on Saturday 6th February 2016, 4 days after the committee was due to consider the report at our meeting, thus the subcommittee report was not be on the agenda for this upcoming committee meeting but may be for the first general club meeting to be held on Sunday 21st February.

A Beekeeping4Beginners course will be held at the Currumbin Community Special School on Sunday 6th March 2016 from 8:30am to 4:00pm, weather permitting, the club hives will be inspected on the day. Course details will be found on the club website. Course fees include the Agskill manual, course notes, BBQ lunch and coffee/tea at the breaks.

Col Payne has made a suggestion box that will be placed at the entry table for all meetings, please feel free to use it with any suggestions, (please include GPS Co-ordinates for my car Sat Nav if you are telling me where to go.)

Cheers and may we all get a Buzz out of beekeeping.

JP

Thanks to new members Michelle & Graeme for sharing their experience with us on the mentoring program.

Graeme and I had Bertie and Col come to our place to give us some mentoring on our new bees. They were both such a wealth of knowledge and both Graeme and I learnt so much. I thought I would send through some photos that I took of them going through the bees with my husband Graeme. Just in case you want to show other new members etc. about getting some of the older members to mentor the new members. We look forward to doing the bee keeping course.



Honey bee facility reveals insights into workings of human brain December 23, 2015

The honey bee brain is extraordinary. In the same way that the human brain expands in size from birth to adulthood, as we are exposed to experiences, so too does the honey bee brain. It expands to absorb memories, scents, experiences and information increasing in size over spring and summer, and literally shrinks over winter, when there is less sensory overload. Two new research papers from Monash University researchers reveal the way the honey bee controls aggression and forms memories. The discoveries have important implications for the way the human brain controls aggression and forms memories, and loses memory with age.

Honey bees offer great insight into the way the human brain works. For instance, honey bees use memory to find their way back to pollen-laden fields, and they communicate in a sophisticated language to tell other bees about danger and new sources of food.

The importance of the honey bee to neuroscience has led to Monash University opening (beginning of December) a completely unique facility to study the behaviour of bees and what they reveal about the human brain. The advantage of having a honey bee laboratory is that behaviour and brain plasticity can be examined in a controlled manner. Bees emerging from the same brood frame in the hive are exactly the same age, so their exposure to environment of the hive is controlled during the first two weeks of adult development.

The honey bee has a highly evolved insect brain, according to Professor Charles Claudianos, from the Monash Institute of Cognitive and Clinical Neurosciences, who was part of the international team that sequenced the honey bee genome in 2006.

"Honey bees have very streamlined genetics with fewer genes than almost any other species – yet they are highly sophisticated in their behaviour capable of colonial 'loving', hive development, nest cleaning and communication," Professor Claudianos said.

Essentially the lack of gene diversity in the honey bee, combined with highly sophisticated behaviours, means that researchers can better track certain behaviours to specific genes which may have equivalent roles in the human brain. Professor Claudianos and his team have used a unique way to study behavior in honey bees. The honey bees are trained to stick their proboscis (tongue) out in response to the presence of an odour that is paired with a sugar reward. This behaviour is then positively reinforced with odours such as lavender or linalool (a common floral odour) so that the bee only sticks its proboscis out when there is an aroma "puffed" into its face. The research using this approach has just been published in Nature Communications.

According to Professor Claudianos beekeepers have, for a long time, used lavender to calm bees down prior to harvesting honey.

"Due to our new research we now know why it works as a calmativie including for humans and their pets. Our team, colleagues from Australia and France, examined how lavender and other key odours modify honey bees' aggression when they defend their colonies against intruders. The odours counteract the potent alarm pheromones that bees release to recruit nest-mates into defending the hive thus reducing overall aggression," he said. Specifically, linking the behaviour to molecular changes in the brain, Professor Claudianos and his team have shown that odours such as lavender block aggressive behaviour not by masking the alarm pheromones, but by switching the response off in the brain.

In another collaborative study this time with colleagues in Germany – also published in November in Nature: Scientific Reports – the researchers have shown how the actual chemistry of the honey bee brain dynamically changes via epigenetic mechanisms when memories are laid down. This identification of how memory-based genes are regulated to result in long-term memory has implications for the way dementia appears to affect short and mid-term memories in humans, yet fails to dampen long term memories. These insights are part of the Claudianos Laboratory examining genetic mechanisms that underpin mental health disorders.

A Sunshine Coast beekeeper puts plans on hold to develop 3D bee hives

Last year Ann Ross from Hive Haven on the Sunshine Coast began using the printers to make hives to house native stingless bees. The native stingless bee industry is small because the honey is difficult and costly to produce, making it a valuable product. Ann Ross said the material used in 3D printers acts as a good insulator, but is too expensive at this stage.



Male bees protect female bees from sexually transmitted diseases January 20, 2016

A team of researchers from The University of Western Australia's Centre for Integrative Bee Research (CIBER) have discovered that the seminal fluid of male bees kills the widespread sexually transmitted fungus *Nosema apis*, offering queen bees protection from the parasite, which can be passed on during bee sex.

The research is good news for honey bees in helping scientists look at new ways of addressing the world-wide decline of the bee population.

CIBER Director Professor Boris Baer said the study found that male honey bee semen produced protein molecules that cause the *Nosema apis* fungus spores to prematurely germinate, killing them because they cannot survive outside of their hosts' cells.

Another smaller molecule in the bee's semen was able to quickly kill the fungus spores directly.

"We also found that these immune molecules in the bee semen were specifically active against the fungus but had no effect on other microorganisms," Professor Baer said.

"This finding was surprising, because insect immune systems are often believed to be primitive and not very complex or specific."

Professor Baer said the spread of parasites and pathogens globally are known culprits contributing to the alarming losses of millions of bees every year.

"This is problematic, given our dependence on honey bees, as they pollinate more than 80 crops of agricultural interest or about a third of what we eat," he said.

"However this new finding, which confirms honey bees are remarkably capable of defending themselves against parasites, will provide exciting new ways to breed bees that cope with diseases by themselves.

"Suppressing parasites with chemicals has become a major issue, because of contaminations of honey with residuals, as well as bee parasites having become more resistant against available treatments."

Letter received through the website.

"I just found your site and read the history section. I was one of the people that attended the TAFE course with John Rosser at his parents family home at Benowa in 1979. I was one of the 9 people that attended the first meeting with my friend Vic Dippelman and we agreed to form the club. I was only about 15 years old at the time and soon after I got a part time job with John Rosser, but I mainly worked with his father. I got to know old Jack Rosser quite well. It was an honour to spend time with him. Good to see the club is still going.
Michael Air"

Club News & Noticeboard

* The field trip to Dave Elson's extracting plant/factory visit will hopefully be in March when it is in full operation. The date to be confirmed at the end of February and will advise when received.

* *The next Introductory Beekeeping Course will be held on Sunday 6 March. Details are on the website.*

* Triple hives for sale. WSP. Located in Mudgeeraba. Phone Charlie Veivers 07 5532 3442.

* *Members are able to read Minutes of Meetings by contacting a committee member to request a copy.*

NOTE: For inexperienced members purchasing hives it is recommended you take an experienced member to advise on health of the hive. Any 'For Sale' notices are not endorsed and independent of the Club.

Col Payne's Beekeeping Stories

The Council Inspection.

Many ordinary citizens have no appreciation of the life of bees or the work that beekeepers do to get the honey from their hives. When a "normal" person has a problem with bees the first thing they do is call the Council.

Over the years, The Gold Coast Amateur Bee keeper's Society has always tried to liaise with the Council on all "Things Beekeeping" including being prepared to attend to complaints regarding nuisance bees. At one stage in the past one of the GCA Bee Society Members was also working as a City Council Nuisance Inspector. Obviously he was the one who was always sent to investigate the complaints.

One day a complaint was received from one of his neighbours. The lady wasn't aware of his occupation. She told the Council that, "I like bees and know that they are necessary and I don't mind him keeping bees. What I don't like is the fact that he often lifts the lid and opens the top and lets them all out." He was sent to investigate the complaint. On his arrival he explained what beekeepers do to get the honey and gave her some and agreed to supply her with some every time he robbed his hives. All calm then settled on the neighbourhood for evermore.

Ipswich Field Day is on Sunday 6 March. New members are encouraged to enter into the competitions and it's a great chance to exchange ideas and learn lots. Glass jars (and free tips if you tell John his honey is the best!!) are available from our Equipment Officer John De Boer. Carpooling to share costs and meet others is a great way to have a fun day. Express your interest in carpooling at the next meeting or contact John Polley if you have empty seats.

The Field day will commence at 9.00am and all entries to be submitted before then. When the program is confirmed an email will be sent out.

HONEY COMPETITION SCHEDULE FOR THE INTER-CLUB TROPHY FIELD DAY – Sunday 6 March

One entry per Member for each class.

All entries to be presented in standard 500g bottles with white lids.

All entries must be from the exhibitor's own apiary.

The following are the Classes that Members can enter:-

1. Light Honey.
2. Golden Honey.
3. Dark Honey.
4. Comb Section in Honey.
5. Creamed Honey.
6. Granulated Honey - Fine.
7. Granulated Honey – Coarse.
8. Beeswax – block of beeswax – min 500g
9. Frame of Honey.
10. Heaviest Frame of honey.
11. Biscuit Recipe.
12. Cake Recipe

Class 11. Honey Shortbread

225grams butter, softened
50grams honey, warmed to soften
1 cup icing sugar
2 +1/2 cups plain flour
60 grams cornflour
1 teaspoon vanilla essence.
Castor sugar to sprinkle

Preheat the oven to 150C.

Cream the butter, honey and icing sugar.

Gradually add the flour, cornflour and the vanilla and mix until well combined.

Roll out and cut into bars. Sprinkle with castor sugar for a crisp finish.

Bake for 20 to 30 minutes until only just colouring on the edges.

Cool on baking trays for 5 minutes before transferring to cooling racks.

Class 12. Low fat Pear & Ginger Muffins

200 grams comb Honey
2 large Eggs
1 ½ cups SR Flour
1 ½ Pears, peeled & diced
2 tablespoons Diced Preserved Ginger
Icing Sugar to dust

This recipe uses comb honey which, when baked, produces a moist muffin without the use of fat. The wax emulsifies in the batter. Humans don't digest beeswax, so it's an inert lipid in our system.

Method: Preheat oven to 180C. Place the comb honey and eggs in a bowl and roughly mash with a fork. Combine lightly with the flour, and then fold in the pears and half the ginger.

Place in well-greased non-stick muffin tins. Top with remaining ginger pieces and bake for approx. 20 minutes until just cooked through and lightly golden. Dust with icing sugar. Makes 12 muffins.

Queen creates bees that attack Varroa Mite

A beekeeper in the US is breeding honeybees can kill the Varroa mite, one of the main reasons why colonies have been dying off around the world, according to a report.

Jeff Berta, who lives on a farm in western Pennsylvania, has a honeybee queen who appears to be resistant to the mites, according to the NPR radio station. The queen's mother was from a colony in Vermont, which managed to survive the cold winters there and also outbreaks of disease. And its father was a drone from bees raised at Purdue University, which were found to groom themselves in a unique way.

"The bees will take the mite and they will bite the legs and will chew on the mite," Mr Berta told NPR.

"And if they bite a leg off of the mite, the mite will bleed to death. "So the bees are actually fighting back. That's the type of genetic line we're after right now."

The queen, known as number 18, is being studied by scientists with funding from the US Department of Agriculture.

Most efforts to save honeybees from the mites have used pesticides designed to kill the latter, while sparing the former, with limited success. However breeding honeybees with genes that enable them to fight off the mites is not a simple process. Queen 18 was born as a result of artificial insemination. If released into the wild, her descendants could mate with bees that do not have the same grooming technique.

Bee geneticist Christina Grozinger, of Pennsylvania State University, who works with Mr Berta, said: "You can't produce a stock and say, 'Now I'm done! And that was it! Now we can sell it everywhere!'

"You have to constantly re-select and constantly have to have people very interested in working as part of this effort."

LIBRARY There is an extensive range of books on all aspects of beekeeping that can be borrowed from the GCABS library. **To browse the list click onto the website link.** www.gcabs.net.au/education/library

Please see our librarian Brian Jones or phone him on 0402 563524 or 5679 3807. If you contact Brian he is happy to bring the book to the meeting and you can collect and then return it the next meeting. If you borrow a book/books **please make sure you return it** the following month as other members may be waiting for the book.

NEWSLETTERS Previous Buzz newsletters as well as other Club Newsletters are available to view on the GCABS website as well as great videos for the newer members.

From the Club Equipment Officer: To assist the members the club does carry a good assortment of bee keeping equipment including, but not limited to, AFB Test Kits, Electric uncapping knives, electric embedding tools, spur wheel embedders, 3 tier plastic uncapping containers, boxes, bottom boards with included beetle traps, AJ beetle traps, Beetle Mat Trap (hanging type), Beetle Jail, Apithor Harbourage beetle trap, Migratory Lids, Diatomaceous Earth, frames, foundation, queen excluders, eyelets, eyelet inserting tools, frame wire, strainers, hive locks complete with strap, hive tools, wire crimpers, embedding boards, books, labels, honey containers including 500g & 1kg, 20 litre buckets, honey gates, 3 frame manual honey extractor (needs to be ordered), stands are also now available but need to be ordered.

Club shirts/hats are available for purchase from John de Boer, and these are also available at our meetings etc.

SPECIALS For the month of February

Smokers: Normally ~~\$68.00~~ special price \$49.50

To assist our members John has an extractor and electric uncapping knife that is available for hire to the members at a cost of \$15. Members from the Southern end of the Gold Coast can make arrangements with John to pick up the extractor & electric knife from John Polley if that is more convenient.

It is the responsibility of members to ensure that all items are cleaned thoroughly prior to returning same to the Equipment Officer.

Don't forget to call John on his mobile (Monday to Saturday) 0417142073 and provide him with a time you will be visiting him to check that he will be home.

Meeting Dates and Events:

February Meeting: Sunday 21 February

Ipswich Field Day: 6 March

March Meeting: Saturday 19 March

April Meeting: Sunday 17 April

COMMITTEE MEMBERS

President	John Polley	Mob: 0421 992 208 president@gcabs.net.au
Secretary	Helen Gormlie	Mob: 0402 116 580 secretary@gcabs.net.au PO. Box 319, Ashmore City. 4214
Buzz Editor	Jim O'Regan	editor@gcabs.net.au
Treasurer / Membership	Roslyn de Boer	Mob: 0417 142 072 treasurer@gcabs.net.au
Librarian	Brian Jones	Ph: 5679 3807 Mob: 0402 563 524
Equipment Officer	John de Boer	Mob: 0417 142 073 Ashmore
Committee Members	Peter Ireland	Mob: 0403 439 907
	Kevin Bell	Mob: 0400 794 789