THE BUZZ - EDITION 441 FEBRUARY 2022

THE BUZZ

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





JOBS in Your Bee Yard this Month

- Rain, Rain! Ensure your bees have sufficient honey & nectar stores. With the almost incessant rain since November, some colonies may need feeding.
- Protect against small hive beetle infestation & slime-out. SHB thrive in hot, moist weather. Have traps & controls in your hives to manage their numbers. Keep your hive crowded. Remove extra supers if necessary so that the population is strong for the space they need to protect.
- Harvest some frames if 90% capped but don't be greedy. Leave a few frames for the colony in case of continued wet weather. Nectar can take longer to ripen in high humidity. Leave the honey on the hive if less than 90% capped.
- Check hive footings are strong. Stand legs sink in soft wet soils.
- In SE Qld & Northern NSW, bees often swarm in late Jan &
 Feb. Inspect for signs of swarming (swarm cells being built)
- Have spare hiveware ready to catch a swarm or split a highly populated hive to prevent swarming. Ensure you have ready a spare hive box or two with sufficient frames & foundation, lid & base.

DATE SAVERS

Queensland is currently adapting to "living with COVID", so we are having to be a bit flexible in how we do things. The information below is correct as at time of publication, but keep an eye on our Facebook page for updates. The Gold Coast Amateur Beekeeper's Society inc. welcomes new members, existing members and visitors to attend. Non-members attending will be asked to make a gold coin donation.

- Sun 20th Feb, 10am 12pm Member Meeting. Dr. David Schlipalius, the new Queensland Biosecurity Officer, will be presenting to us. Location: Our new clubhouse!! 74 Billabirra Cres, Nerang QLD 4211. Please see President's Message on the next page for more info. Please bring a chair ensure it has no sharp edges on the legs so as not to damage our new floor.
- Sat 26th Sun 27th Feb Beginner Course. Our first course for the year. Register here: https://www.eventbrite.com. https://www.eventbrite.com. https://www.eventbrite.com.
- Sun 20th March 10am -12pm. Member Meeting. A presentation on the collection and use of bee venom by Whale Labs Venue: GCABS Clubhouse, Nerang Country Paradise Parklands

From GCABS President



So much rain this year at a time that would normally be the most productive time of year for our bees. Whilst some areas are struggling with honey and nector stores I am always amazed at their resilience. The story on page 4 about bees surviving a volano is a great example of this. For most suburban beekeepers our bees are still thriving, but with all this moisture we do need to pay particular attention to Small Hive Beetle. We lost a hive to this last year, and it seemed to happen out of nowhere. One inspection everything was fine and within three weeks the entire hive was gone and slimed out so please check regularly!

As you know last months member meeting had to be held on-line due to the Covid situation being at its peak. We now seem to be over the peak and government strategy

is now leaning to how we "live with Covid". As a club we must do the same, and we have made the decision that our February member meeting on the 20th will be the first we conduct in our new clubhouse. That said, we will still take precautions. Masks will be mandatory and we will likely need to limit capacity. As I write we are working out those details so stay tuned to our Facebook page as we get closer to the day. For those that can't attend, are vulnerable Covid wise, or simply do not want to take the risk, we totally respect that and are planning to record the meeting presentation for others to view afterwards.

For those that have mobility challenges, please park in the top car park next to the clubhouse. This space is quite limited, so if you don't fit in that category we ask that you park in the main Country Paradise Parklands car park (where you parked for last years meetings) and walk up. It is not far, and a very pleasant walk!

I am very much looking forward to us being able to socialise face to face once agin. So much of our learnings as bee keepers occurs in those friendly side conversations before and after our meetings. See you then!

Cheers, Colin Allen - President

January Honey Flora - S.E. Queensland

Submitted by Jim O'Reagan

Blackbutt. Blue Heliotrope. Broadleaved Banksia. Broad-leaved Ironbark. Brown Bloodwood. Brown Box. Coolibah. Grass tree. Grey Mangrove. Gum-topped Box. Hickory Wattle. Mallee box. Mexican Poppy. Moretonbay Ash. Paper-barked Tea-tree. Pink Bloodwood. Red Stringy-bark. Silverleaved Ironbark. Small-fruited Grey Gum. White Stringy-bark.







Blackbutt



January Member Meeting Review

The first GCABS Members' meeting for 2022 was held online due to concerns over the rapid spread of local COVID cases. Although we were unable to meet in our new clubhouse, the meeting was an excellent one none-the-less.

Our guest presenter, John Steytler, gave a wonderful presentation on the development of his business East Coast Bee Services from hobbyist to commercial beekeeper. He started beekeeping in 2008 to increase pollination for his vege patch. In July 2013 he went full-time. It has taken him 6-7 years to build the business to a point were it is 'cooking along well'. He now has about 250 hives on sites in S.E Qld & Northern Rivers NSW. He



Market Stall Honey Sales

has reinvested earnings ongoingly in plant & equipment, thus avoiding the risk of large financial loans.

His business is diverse with income streams across: honey sales, wax sales, swarm removal & pollination services. Regarding swarm removal, John does work for council & police (free), as well as for developers,

agents, private individuals & groups (paid). It is not just the simple stuff! He has done huge, tricky, time-consuming cutouts from walls, roofs, floors. He sometimes spends up to 7 ½ hours a day in a bee-suit and reports a weight loss of up to 2kg in sweat!

John says that getting pollination work has been tough because connections&contracts are traditionally tightly held among beekeepers. He has secured work so far providing hives for pollination of macadamias, blueberries & zucchinis.





Honey production and the significant equipment investment

John & several meeting participants commented that Australian honey is sold too cheaply considering we have such a premium product. When we sell too cheaply as amateurs, it impacts the whole industry.

GCABS sincerely thanks John for sharing his time, experience & knowledge. Missed the meeting? Watch the whole meeting via this link: https://tinyurl.com/v2fu2hjm





Swarm collection from some very difficult locations!

How did Thousands of Bees Survive 50 days of being buried in Volcanic Ash?

Thanks to Tony Nathan for submitting information about this story.

Five of six hives of honeybees in Spain's Canary Islands survived being buried under volcanic ash for about 50 days after the eruption of the Cumbre Vieja volcano in La Palma, which blew on Sept.19. Amazingly, inside the hives, the beekeeper found that tens of thousands of live honeybees, part of the local Canary black bee species, had managed to carry on despite the heat and poisonous gases released by the volcano.

The bees' ability to stay alive in such dire conditions is a reminder of their toughness, a characteristic that is often overlooked amid news stories about the very real threats they face from pesticides, parasites & loss of habitat. Their resilience is commendable & reassuring.

So how did they survive for so long in such threatening conditions?

- 1. Distance from the eruption: The hives were about 600 mtrs from the epicentre. Closer hives did not survive as they were buried under lava and a much greater covering of hot ash.
- 2. The 5 of 6 colonies that survived were strong in numbers. The only one that did not survive already had a weaker population.
- 3. The beekeeper had not yet removed the summer honey harvest, so the hives had adequate food reserves while the ash covered them.
- 4. A key part of the bees' survival was propolis. The La Palma bees used propolis to seal themselves inside their hives to protect themselves from the volcanic gases.
- 5. The ash that fell on the hives was particularly porous, consisting primarily of lapilli, or rock fragments, that volcanoes eject as they spew. This porousness allowed some air to pass into the hives through the ash.
- 6. Two hives were only partly buried, so the bees chewed a hole near the top so they could still fly for cleansing flights.
- 7. Of the three hives that were totally buried, the bees could not leave the hive at all. However, by reducing their activity level, bees can survive higher levels than usual of the CO2 that they expel. With the porous ash cover, there would have been slow but adequate exchange of fresh oxygen for CO2.





Hives that Just Won't Thrive

A compilation by the editor from experience & research.

The Problem

Picture this... you have several hives, the hiveware is in good condition, painted in attractive colours, each containing a queen of similar age & breeding. Most are buzzing with activity & powering on... except that one that just seems so much quieter. Why?

At some time during our beekeeping journey, we will all experience a hive that simply refuses to thrive. The population remains average, the queen's laying pattern is fairly solid, although never across the whole frame or on as many frames as in other stronger hives. There are honey & pollen stores but never in more than just barely adequate amounts. You've inspected & tested the brood several times but have not revealed any disease...so what is going on? Simply put, not all hives are equal!



A strong versus non-thriving hive

The Causes.

What factors are at play that can produce this outcome?

- 1. Set up: Let's consider wild or feral honeybee colonies, meaning those that have swarmed and set up residence in a location of their own choosing, rather than in a box in a bee-yard. Typically these colonies locate at least 800 mtrs apart, though this likely varies by locale depending on the environment and resources available. In contrast, the beekeeper creates an artificial environment for his/her bees in which the hives are commonly located close together in more of a 'feedlot' style.
- 2. Colony size: Returning to the comparison between wild & 'kept' colonies, there is often a huge size difference between the typical beekeepers hive/s, each often three boxes high, and the average cavity size chosen by wild honeybees. This commonly results in colonies much larger than would be found in the wild. So, due to this heavy concentration of honeybees in a limited location, the competition for resources of pollen, nectar & water can be fierce. Colonies with greater populations have the capacity to claim the 'lions' share', while a colony with lesser population will struggle to even maintain their status quo. Without management by the beekeeper, this greatly puts that 'non' thriving' colony at risk of further decline, of being robbed out by stronger colonies & of managing pests like small hive beetle.
- 3. The Queen: Not all queens are created equal. Even when floral resources are richly available and more than adequate for the bees within the foraging range, some colonies still fail to thrive. The problem can generally be attributed to the queen. Older queens or poorly mated queens can begin to lose their fecundity with the result that they lay less, lay in a spotty pattern or may begin to lay a higher proportion of drone (unfertilised) eggs. Even a queen purchased from a breeder may sometimes underperform. Research has shown that good and poor queens can be essentially indistinguishable in terms of sperm counts, sperm viability, body size or weight, yet some are just occasionally 'duds'. In any of these scenarios, the result is often a hive population that mooches along, neither increasing or rapidly declining for some time. In the wild, this type of colony would generally either supersede that queen in an attempt to survive, or die out. The 'kept' colony would follow a similar path unless the beekeeper intervenes.

The Solutions

The beekeeper, having created an artificial environment for his/her bees, has also created potential for issues that require management. Now, with regards to that 'non-thriver'....congratulate yourself for recognising that the colony is underperforming and act before they reach the point of no return.

- 1. Reduce the size of the entry. A weaker colony is vulnerable to robbing from other colonies & wasps. Reduce the entry to as little as a couple of centimetres.
- 2. Reduce the hive cavity so that your bees can regulate their temperature more easily. Remove empty combs. Undefended empty combs will allow for wax moths and hive beetles to breed out of control. Remove empty honey supers.
- 3. Feed them. Many problems in the hive are exacerbated by a lack of food ie less energy & strength among workers to manage ailments & protect itself; a queen will not lay well if there is insufficient food stores to support the population. If



A non-thriving hive due to hunger. Note the limited brood area although the laying pattern is reasonably solid, no nectar, minimal pollen, low bee numbers

the hive lacks nectar/honey, start feeding them 1:1 sugar:water and see if they improve. WARNING feeding a weak hive can be tricky because sugar water can draw pests & promote robbing. Use internal feeders.

- **4. Add capped brood**. There are two main hurdles to a colony recovering: food and population. When they have plenty of both, they can usually overcome problems on their own. When your colony begins to shrink, they will almost always benefit from a boost in population. If you have a second, healthy colony you can steal a frame of capped brood from them and give it your weak hive. Make sure you find a frame with mostly capped brood.
- 5. Requeen The ability of a young fertile queen bee to lay strongly will enable a colony to grow & overcome a myriad of problems. If you have a failing queen or a 'dud', you'll need to remove & replace her... the sooner, the better. GCABS' committee member, John Vallance, recently posted on the GCABS' FB Members Forum about an underperforming queen, "This queen was a supersedure queen and she has turned out to not be good in any way shape or form and has made the hive go backwards. I will make sure that they don't raise a new queen from her stock". Sometimes to save the whole, you have to sacrifice one.

References:

https://www.theapiarist.org/spotty-brood-failing-queen/

https://beekeepinglikeagirl.com/5-ways-to-help-a-failing-hive/

https://www.perfectbee.com/your-beehive/starting-a-beehive/bees-need-thrive-in-your-location



Education Opportunities

Biosecurity for Beekeepers Online Training (BOLT)

A FREE course with essential information – approximate duration: 90 minutes. This course is designed for individuals who have at least a basic understanding of beekeeping practices, and would like to learn more about protecting their bees from pests and diseases.

The Biosecurity for Beekeepers course provides information about keeping your honey bees healthy, looking for pests and diseases, and some measures you can use to protect your apiary. The course supports the Australian Honey Bee Industry Biosecurity Code of Practice. The development of this course was funded by AgriFutures Australia, and delivered by the Australian Honey Bee Industry Council, the Australian state and territory governments and Plant Health Australia.

BEE ZONE Apiary Training

Kevin Tracy, GCABS Member and owner of BEE ZONE Apiaries, has several courses on offer:

February 5 & 6 Rear Queen Bees https://www.youtube.com/watch?v=q6BluwoxP5g

February 26 & 27 Artificial Insemination

March 5 (1 day only) Native bees

March 12 (1 day only) Beyond Beginner

March 26 & 27 Seasonal Management

April 9 & 10 Rear Queen Bees

April 30 & 1st May Pests, Diseases, Sampling

May 7 (1 day only) Beyond Beginner

More info with reference to specific subject content when you request enrolment.

Contact: Kevin Tracy - kntracy@gmail.com for info and/or enrolment form.

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