THE BUZZ - EDITION 422 MAY 2020

# THE BUZZ

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





### **DATE SAVERS**

- All General Meetings are cancelled until after Covid19 restrictions are removed.
- Mudgeeraba Show: Postponed until Oct 2nd -4th
- 20th May World Bee Day. Join in the online events
   Global Waggle Dance Challenge <a href="https://www.worldbeeday.org.au/listing/waggle-dance/">https://www.worldbeeday.org.au/listing/waggle-dance/</a>
   Screeening of the movie Honeyland <a href="https://www.worldbeeday.org.au/listing/honeyland/">https://www.worldbeeday.org.au/listing/honeyland/</a>

# A Mother's Day Tribute to Queen Bees



As our thoughts turn to Mothers this Sunday May 10, what better time to pay tribute to the mothers of our bees, the Queen Bee, the heart of every bee colony.

Her role in the survival of the colony is indisputable. She leaves the hive only once in her lifetime to mate with up to 30 drones and then returns to the hive never to mate again. The rest of her life is spent producing babies, laying about 2500 eggs a day in summer — about one every 40 seconds!

She doesn't eat much honey. Her lifelong diet is Royal Jelly, a combintion of proteins and sugars secreted in the hypopharynx of nurse bees. A worthy diet for such a dedicated mother!.

## President's Report



I feel like the bees are finally catching up to our current state of 'hibernation' while we all wait for this virus to be gone from our lives. As the weather has cooled off over the past weeks, the bees have begun to slow down and prepare for the quieter pace of our glorious Queensland winter.

If you're new to bee keeping, now is the time that you should be preparing your bees for winter. A full inspection should be conducted in the next few weeks (if you haven't already) to ensure your hive is healthy with no sign of disease, pests are well managed and that they have plenty of stores of pollen & nectar to over winter.

You should also be looking at the strength of your bee population and reducing the hive size accordingly to their population. Bees like to be cosy and in the cooler months it is especially important to keep them warm.

This time of year is also the perfect time to clean up frames, give boxes a repaint, build new equipment and get everything ready for Spring. We rarely have time once the bees get onto the Spring flow so make the most of this quiet period to recharge and get your apiary in shape for next season.

Stay healthy and safe!

Travis Green

**President** 

### May Honey Flora - S.E. Queensland

Submitted by Jim O'Reagan

Banksia. Black Sheoak. Broad-leaved Banksia. Flooded Gum.Glycine. Golden Candlesticks. Hickory Wattle. Honeysuckle Oak. Mountain Coolibah. Paper-barkedTea-tree. River Sheoak. Rose Sheoak. Tumble-down Ironbark. White Box. Gordonia (see also gordonia photo on back page).



Golden Candlesticks



Broad leaf banksia



Gordonia (fried egg flower)

### Research & in The News

### **New Hives**

September 9, 2019

This researcher suggests redesigning hives to increase the survival rate and honey yield of bees. He maintains that these could balance the needs of honey bees with those of their human keepers.

https://theconversation.com/to-save-honey-bees-we-need-to-design-them-new-hives-121792

# Coronavirus may prove boost for UK's bees and rare wildflowers

Thu 9 Apr 2020 Jonathan Watts

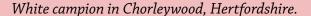
Populations could recover as verges are left uncut, setting what conservationists hope will be a long-term trend: <a href="https://www.theguardian.com/environment/2020/apr/09/coronavirus-may-prove">https://www.theguardian.com/environment/2020/apr/09/coronavirus-may-prove</a>



Rare wildflowers and declining bee populations could start to recover during the coronavirus lockdown because many councils are leaving roadside verges uncut, while they distribute their resources to other activities as a result of the coronavirus.

This is likely to lead to an explosion of colour in the countryside this summer and bring benefits to not only bees, but other pollinators (butterflies, birds and bats), as well as the public, desperate for wildlife and colour right now.







Pyramidal orchids on verge in Dorset.

## Bees seeking bacteria: How bees find their microbiome

April 14, 2020

Insect pollinators are responsible for a huge proportion of plant pollination worldwide, including an estimated third of agricultural crop pollination. Chemicals such as pesticides and fungicides harm both honey bees and wild native bees. Recent studies are revealing the potential benefits of the bee microbiome for maintaining the health of these pollinators and mitigating viruses and disease.

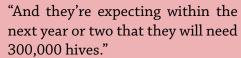
https://theconversation.com/bees-seeking-bacteria-how-bees-find-their-microbiome-129534

### Aussie Agriculture future needs to be secure

James Dunn 26 November 2019

Australia has big plans for its farming sector, which highlight the vital role of the humble honey bee, the unsung hero of the food industry's pollination requirement. According to a 2018 study from Curtin University, 53 crops in Australian agriculture industry depend on bees for pollination, but Australia may well not have enough bees for the pollination task.

"In August, the almond industry required about 240,000 honey bee hives for pollination, which is more than half the number of managed honey bee hives in Australia," says Fiona Chambers, chief executive officer of the Wheen Bee Foundation, a not-for-profit organisation that promotes awareness of the importance of bees for food security, and raises funds for research that addresses the national and global threats to bees.





The almond trees' pollination window is about six weeks; beekeepers, often from Queensland and northern New South Wales, are contracted to bring their hives to the almond-growing region along the Murray River (68% of the trees are in Victoria).

Pollination broker Trevor Monson says that this year, for the first time, the almond trees "almost ran short of bees to pollinate them."

He says the problem is that there are now competing centres of demand for the bees' services.

"You have thousands of hectares of avocadoes being planted in Queensland, and they flower at the same time as almonds. You have the blueberry industry, which has expanded enormously in the last five to ten years in the northern part of the country, and they flower at the same time as almonds.

"On top of that, you now have the macadamia industry in Queensland and northern New South Wales burgeoning," Monson says.

Australia simply needs more bees. "I believe that we can breed the bees and meet the numbers required, but the drought in New South Wales and Queensland has made it harder to breed bees. Unless that changes, we could be under pressure," Monson says.

For the food industry, pollination security is "as important as water," says Chambers. Almond producer Webster Limited – which produces about 200 tonnes of almonds each year – recently paid \$8.2 million for Australian Rainforest Honey's 5,500 bee hives. Last year, it cost Webster \$340,000 to hire the bees to pollinate its almond trees, so the company bought its own.

### The full article is here:

 $\frac{https://www.nationalgeographic.com.au/australia/aussie-agriculture-future-needs-to-bee-secure.as-px?fbclid=IwAR2oHsI-7scR0oXk3ymtmYoL4emV5ktGFYNUcEi5TwqvF0HRLk3oQ1b2SqU}{}$ 

# Autumn Preparation - "Winter is Coming"

Paul Fullwood (Greenwood Farm Bees) republished from May 2019

Living in the Sunshine State, you could be forgiven for thinking we know nothing of cold winters. And you are probably right when you compare our winter to those who live on latitudes closer to the poles. However, the seasons do change and so must our beekeeping practices, if we are to maintain strong healthy colonies through the darker months. Within our city boundaries, there are a wide variety of geographies, micro-climates and floral landscapes. Therefore, our individual practices are equally varied. What works on the coastal plains is very different to the hinterland. The urban beekeepers with sparse native flora must manage their colonies differently to those on semi-rural and rural acreages. We all have a unique environment for our bees.

While there is no "one size fits all" recipe for successful beekeeping, there are some guiding principles or KEYS which if understood, can refine the various management practices required in your area. The goal, to enter Spring with a strong, healthy and populous colony, will set up the bees and the beekeeper for a productive and rewarding Spring and Summer. Here are FIVE KEYS to Successful Overwintering of Honey Bees:

**Nutrition:** maintaining a balanced and constant food supply, both honey and pollen.

- Don't be a greedy honey merchant, leave more honey than you think they need
- If you do have excess capped frames, bank it for the colony for when their resources dwindle. The bees will appreciate their crop being returned.
- Plan and prepare supplemental feeding sugar syrup (1:1 ratio see Editor's note) and pollen (patties or powder)
- Replace any capped honey in dark comb located in the brood box with capped honey in fresh comb. The old comb contains toxins that can be harmful.
- This will encourage continual brood rearing and ensure brood are given adequate nutrition

**Colony Strength:** maintaining the critical mass of the colony. With bees, there is strength in numbers – warming, foraging, hygiene, nursing duties all benefit.

- A weak hive going into Winter may not survive they certainly won't get stronger over Winter.
- Combine a weak hive with a strong hive (newspaper method)
- Combine a hive with a failing/aging queen with a hive that has a young and virile queen. Don't wait till Spring to replace her.
- Inspect the brood chamber to assess the quality of the queen both size of brood ball and pattern of laying are great indicators. Manipulate frames to keep the brood ball tight.
- Inspect the brood chamber for presence of pests and/or disease, then take appropriate steps before winter. Sweep out your baseboard, remove old, dark or damaged comb.
- Pre-order your Spring queens NOW! Your preferred queen breeder will appreciate the advanced planning.

**Bee Space:** optimising the space within the hive to enable effective temperature regulation, minimising bee movements and food consumption

- Put the maximum numbers of bees into the minimum space
- Pack them down till they look like a colony on the verge of swarming they love each other's close company
- Remove excess supers. Three boxes goes to two. Two goes to one.
- Compress frames by removing empty drawn comb.

- Keep the brood ball condensed and surrounded by frames of honey and pollen supplies.
- Increase insulation both horizontally and vertically. Extra honey frames beside the brood frames for the former and top mats and inner covers under the lid. Hessian or chux cloth stapled to the inside of the lid will wick away any moisture and rising damp inside the hive.

**Do Not Disturb**: Eliminate disturbance which affects critical temperatures and increases stress and movement

- Sudden drops in temperate inside the colony, affects three critical temperatures:
- Brood temperature, affecting mortality rates
- Air temperature, affecting the micro-climate of the hive inducing increased heat generating activity and increased food consumption
- Body temperature of the bee, which can force workers to change tasks to increase their warmth.
- Learn to READ THE HIVE, without lifting the lid. This skill is especially useful in Winter.
- To do this, set up a comfortable viewing station at the entrance
- Engage multiple senses sight, sound, smell and feel to monitor the hive.
- Assess the activity level at the entrance quantity of bees, speed and tasks
- Assess incomings for pollen and outgoings for hygienic activity (dead bees, larvae, drones)
- Assess the condition of the bees are they fat, furry and plump, or skinny, tattered and sluggish?
- Take a whiff of the air, is it fragrant and sweet or fermented and sour?
- Feel the buzz, is it gentle and whirring or high pitched and distressed?

**Location:** Make minor adjustments to your colony's location which minimise the effects of winter conditions – low light, cold winds and damp air.

- Your bees can deal with heat and cold. They can deal with dry, but WET/DAMP conditions are their enemy. Keep the hive OFF the ground, recommend 300mm-500mm
- Maintain a full-sun position for Winter trim back any overhead branches
- Adjust the aspect to ensure maximum exposure to sunlight and minimum exposure to wind
- Reduce the size of the entrance, this will help minimise the effects of wind and damp air
- · Consider the air drainage in your apiary, hollows and pockets contain more damp air

There are many variations on the themes (KEYS) provided here. However, you know your local environment best. Select the strategies that best suit your micro-climate and your hive and with good management and good luck, you will enter Spring with a hive bursting with plump, active bees.

### Paul Fullwood

Greenwood Farm Bees Springbrook



**Editor's Note:** Dr Doug Summerville is NSW DPI Technical Specialist, Honey Bees and Chair of the AgriFutures Honey Bee and Pollination Research Panel. He claims that the principle cause of loss of colonies over winter is starvation, not cold. If they do not have enough of their own honey, Summerville recommends using Sugar Syrup at a ratio of 2:1 sugar:water and to discard any unwanted fermented syrup after 3 days.

For further information on Wintering our bees, refer to Dr Doug Summerville's publications:

- Wintering Bees: <a href="https://www.dpi.nsw.gov.au/">https://www.dpi.nsw.gov.au/</a> data/assets/pdf\_file/0011/331697/Wintering-bees.pdf
- Fat bees, skinny bees: <a href="https://www.agrifutures.com.au/wp-content/uploads/publications/05-054.pdf">https://www.agrifutures.com.au/wp-content/uploads/publications/05-054.pdf</a>
- https://www.dpi.nsw.gov.au/data/assets/pdf\_file/0018/532260/Feeding-sugar-to-honey-bees.pdf

### Beekeeper Spotlight - Alan Betts

Alan has always lived an active life. He first became interested in beekeeping as a child when he used to help his father look after the bees on their 20-acre property in Acacia Ridge, near Brisbane. Born on his father's birthday, they used to spend much time together hunting and fishing and his father acted as a mentor, instilling a love of bees within the young Alan. As a young adult, Alan trained as a graphic art teacher and headed several TAFE colleges in country Queensland, so his beekeeping was put on the backburner. However, when his parents moved to the Gold Coast, a swarm at their block of flats re-ignited his interest. He moved to Elanora where he had 15 hives with an abundance of flora.



He became an active member of GCABS about 15 years ago,

serving as President for 5 years, then Vice-President and as a committee member. He says that in the early days they used to meet at a park in Southport and at members' homes. They would hold alternate lunch and morning tea meetings and were a close-knit group. It was an opportunity to support each other and socialise. The membership grew to about 80 and remained an active group. Their club hives were initially kept at Jim and Olive Cavanagh's property.



These days Alan resides at a beautiful, lofty 10-acre property on the QLD/NSW border in the Tomewin/ Currumbin area. A cool breeze wafts over his porch which sports a view of Mt Cougal in the distance. His property is a true bee haven with its rich, volcanic soil supporting an abundance of fruit trees, bee-friendly native flora (Titree, Manuka, Jelly Bush), an abundance of vegetables, and about 20 beehives, all of which he basically manages single-handed. While we were there, the flowers on his Gordonia trees (otherwise known as 'fried-egg plants) were covered in happy bees, 3 or 4 to a flower! (See photo on the final page).

He doesn't sell his produce or remove much honey, preferring to leave most of it for the bees. The honey he does harvest however, has helped him to win multiple awards at the Gold Coast, Mudgeeraba and

Murwillumbah Shows, making him a champion contestant. He now says he is thinking of taking a back seat soon which means others can get more of a look-in!

When asked what advice he would offer to new Beeks, he suggests starting small with a strong hive. He advises being gentle when dealing with your bees and being aware of their mood – avoid dealing with them when they are unhappy or unsettled or on rainy, windy or cloudy days.

Alan has gained much from his time as an apiarist. Apart from competition successes, he enjoys the social aspect of mixing with other beekeepers, plus the knowledge he is doing his part in helping these little creatures to survive and thrive in our environment.



### World Bee Day - A short history

Celebrated on May 20 each year as a day for the global public to acknowledge the vital role of bees for the ecosystem, due to social distancing requirements this year, the usual World Bee Day events have had to be altered and are encouraged to be online or virtual.

Why was 20 May chosen?

Slovenia first proposed that 20 May be proclaimed World Bee Day and the UN member states approved their proposal in December 2017. There were a couple of reasons why this day in May was chosen. In May, the northern hemisphere sees bees and nature develop profusely, while the southern hemisphere enters autumn, when hive products are harvested and the season of honey and honey-based products begins. In addition, 20 May is the birth date of Anton





Janša (1734–1773), a Slovenian beekeeper, the pioneer of modern beekeeping and one of the greatest authorities on the subject of bees. The Austrian Empress Maria Theresa appointed him to the post of permanent teacher of apiculture at the new School of Beekeeping in Vienna. He became well known even before his death in 1773. After 1775, all state beekeeping teachers had to teach the subject in accordance with his teachings and methods. You can watch a short video about his life here: <a href="https://www.youtube.com/watch?v=hMSnhh8qQGQ">https://www.youtube.com/watch?v=hMSnhh8qQGQ</a>

# Library corner

This month's edition of The Australasian Beekeeper includes the following articles and is available for loan.

- 1. In the Apiary Keep your Colonies Cool
- 2. Beekeeping in Nepal
- 3. Darwinian Beekeeping- An evolutionary Approach to Apiculture
- 4. Bees- Feral, Wild and Native
- 5. The Nosmea Problem The causes of Dysentery in Honeybees
- 6. A Closer Look- Propolis Collection and Use
- 7. Recent Research Neonics Driving Increase in Honeybee Toxicity; Bacteria Engineered to Protect Bees from Pest and Pathogens.

If interested in borrowing, contact Ann Allen: 0402 996 101, <a href="mailto:librarian@gcabs.net.au">librarian@gcabs.net.au</a>



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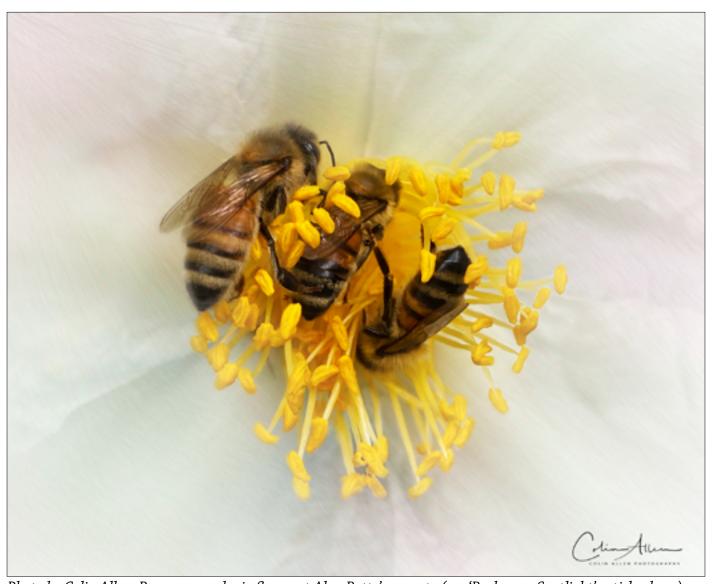


Photo by Colin Allen. Bees on a gordonia flower at Alan Betts' property (see 'Beekeeper Spotlight' article above)

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