BEE NEWS

August 2021
Issue 121

Monthly newsletter of the Sunshine Coast BeeKeepers Inc.

www.sunshinecoastbeekeepersinc.org.au

Photo by Linda Blackwell, bees on grevillea flowers

President's Report

Trust everyone is coping with Covid restrictions. Word is that by the time everyone gets vaccinated, we will need to line up again for the next shot, so get used to social distancing and wearing masks.

The disruption has resulted in delays getting equipment back from Steriotech and return of our club hives, which are now due back in time for this month's introduction to beekeeping course.

NEXT MEETING

Saturday, 28 August at the Club House, 43 Farrell Street Yandina.

Morning tea and catch up starts 9.30am, BYO plate of food to share and a prize for the raffle.

Meeting to start at 10.00am.

Think all would agree that the catering volunteers did a marvelous job with lunch after the last meeting, and we should endeavor to make it a more regular part of the program.

How refreshing was the talk by our newest members on their flow hive operation. Let's hope they will get more involved with the club as they have a wealth of practical knowledge which would benefit particularly beginners.

It has been a great start to spring so don't delay checking hives to remove fully capped frames of honey and install extra foundation in the brood box.

The club is endeavoring to ensure that there is plenty of supplies of equipment for the swarm season, but stock up early

Look forward to catching up with everyone at the next meeting on 28th August. Keep well and bee safe.

Alby Taylor

Know someone interested in bees? Why not forward this newsletter to them!

Swarms

Swarm season is at its maximum from September to December each year.

Every beekeeper needs to take management strategies to prevent swarms as bees are often not welcome in our neighbours property.

Northern Sunshine Coast: John Writer, 0409 118 888.

Southern Sunshine Coast: Ian Meyers, 0412 694 058.

Maleny and surrounds: John Baker, 0418 791 149.

Mentors for New Beekeepers

Beerwah - Bruce Wallace 0418 833 997

Backall Range - John Baker 0418 791 149

Buderim - Rod Hutchinson 0411 477 241

Caloundra - Ian Meyers 0423 231 754

Coolum / Perigian - Katie Livock 0414 843 342, Sarah Keast 0435 388 425

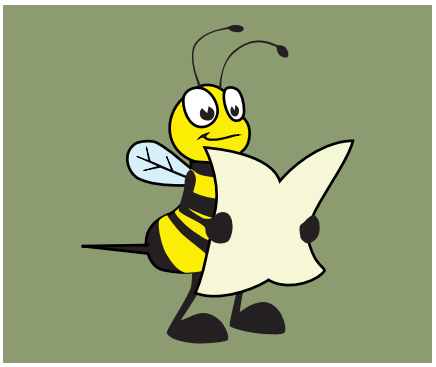
Maroochy River - Tony Minto 0419 661 843

Woombye - Chris Johnson, Shane Simpson 0407 520 078

Yandina / North - John Writer 0409 118 888

Bee Buddy Register

For those members who would like a mentor, and for those who are happy to mentor, contact the Club Secretary Bill Spencer (secretaryscbees@gmail.com, 0419 149 947).



BEES IN THE NEWS

Bee Prepared: Importing bees to help protect against varroa mite: ABC Landline - 16 July 2021

Bees have been imported into Australia for the first time in almost twenty years. Queen bees have been specially bred to cope with the varroa mite and are being artificially inseminated with local stock to help build pest resistant colonies.

Devastated by wildfires, Turkey's beekeepers see grim future: AP news wire - 8 August 2021

Turkey's wildfires have left little behind, turning green forests into ashen, barren hills.

Farm pesticides killing twice as many bees than first thought, study finds: Independent News - August 2021

'Synergistic effect' of using pesticides together could

Workshops for New Beekeepers

The upcoming Beekeeper's Course on 11 September has some places available.

The Course on 9 October also has places available

Booking is essential.

Book online at: www.sunshinecoastbeekeepersinc.org.au/workshops.

* Freepik

The Club Online

To save our members time searching online, the Club's website has links to the best beekeeping information and websites we can find.

www.sunshinecoastbeekeepersinc.org.au

Also, check out our Facebook page for more Club news.

www.facebook.com/pg/sunshinecoast-beekeepersaustralia/posts/?ref=page_internal

accidentally kill more bees, experts warn. The factors - many of which are a consequence of human activity - include land use and climate change, with intensive agriculture and pest control playing a significant role.

Teen Oliver Jordison gets a buzz out of bucking Beekeepings mature-age trend: ABC Western Plains - August 2021

The typical Australian beekeeper is well over 50 but one keen apiarist is doing his bit to bring the average age down.

Oliver's enthusiasm is good news for an industry keen to attract younger beekeepers. The 13 year old has developed a passion for the bees in his flow hives. He says beekeeping is a fantastic hoby for teenagers and a great way to make money.

CRC Honey Bee Products

Cooperative Research Centre for Honey Bee Products – West Australia

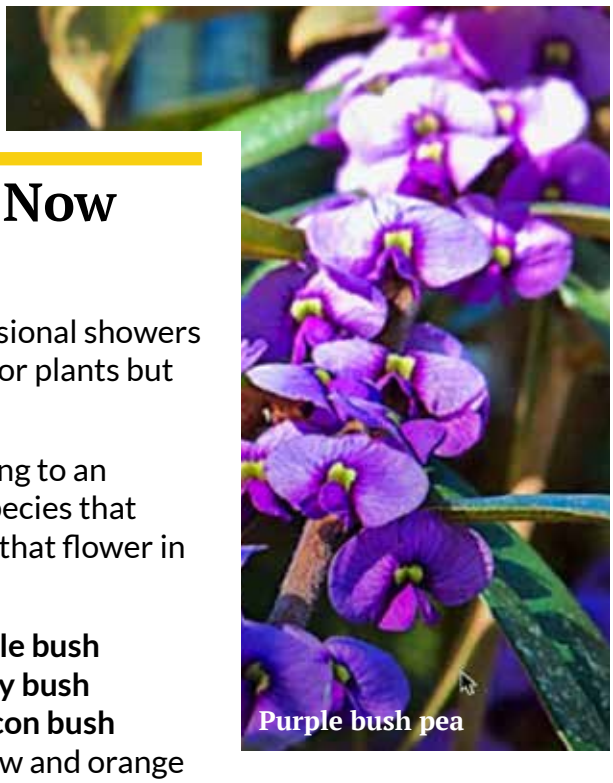
Low prices for honey bee products originating from Australia do not reflect their true value as unique and pure. Endemic flora, together with regulated isolation, has created the opportunity to produce rare honey bee products from healthy bees, and develop a niche market.

This federally funded Cooperative Research Centre (CRC) will resolve industry problems that limit both the value and expansion of the Australian honey bee products industry. The CRC will also contribute to disease insurance policies to address a major global threat to our Australian honey bees.

A centre based around research, training and education. The website is very interesting with research papers:

- Honours and students projects
- Post-graduate projects
- Involvement in the community to map the flowers

http://www.crchoneybeeproducts.com/about-the-crc-for-honey-bee-products/


Purple bush pea


Hairy bush pea

What's Flowering Now

Linda Blackwell

Our climate is still mild with occasional showers keeping everything moist. Good for plants but not necessarily for bees.

The spectacular wattles are coming to an end. However there are wattle species that flower all year and, some species that flower in response to the climate and rain.

This last month we have the **purple bush pea** (*Hovea acutifolia*)and the **hairy bush pea** sometimes called the **egg bacon bush** (*Pultanaea villosa*) which has yellow and orange pea flowers. These are small shrubs which when seen together look amazing.

Also flowering in many gardens are the numerous grevillea species and cultivars which both attract the honey and native bees. Because of the regular rainfall the native violets are also flowering. You do see bees on these but the wallabies enjoy grazing on these small tasty herbs.

Also flowering is *leptospermum scoparium* which is one of the manuka producing native plants. I also have planted some *leptospertmum*


Leptospermum scoparium


Grevillea Dorothy Gordon

polygalifolium commonly known as **jellybush** a local manuka producing shrub. These are hardy plants and flower in spring.

Still flowering is the **hairpin banksia** or *banksia spinulosa* plus groundcovers **happy wanderer** (*hardinbergia violacea*), **pigface**, **fan flower** (*scavola aemula*), **yellow buttons** and *hibbertia scandens* or **snake vine**.

Many of our large trees are also flowering at this time of year from **sassafras** in July to a number of eucalyptus varieties flowering from May through to August – **western white gum** (*E. aragophlocia*), **Gympie messamate** (*E. cloeytonia*), **red ironbark** (*E. crebora*), **rose gum** (*E. grandis*), and **tallowwood** (*E. macrocarpa*). The best heralder of trees in flower is the noise from rainbow lorikeets feasting on the nectar.

Our bees should be doing fine and spring should bring on a bumper honey flow.

If you want to keep up to date with what's flowering now in our region check out the facebook page of Mooloola Landcare Riverwatch as they post flowering indigenous plants weekly.

2020 - 2021 Executive and Committee

President	Alby Taylor	presidentscbees@gmail.com	0418 882 282
Vice-President Publicity	Katie Livock	vicepresidentscbees@gmail.com	0414 843 342
Secretary	Bill Spencer	secretaryscbees@gmail.com	0419 149 947
Treasurer	Paul Bonner	treasurerscbees@gmail.com	0403 432 952
Committee	John Baker	mail@johnbaker.com.au	0418 791 149
Committee Newsletter Editor	Linda Blackwell	lineb@internode.on.net	0409 848 466
Committee Strategic Planning	Evan Flower	evan.flower@bigpond.com	
Committee Hive Master	John Writer	monarocove@gmail.com	0409 118 888
Facebook/website	Frank Vos	frankvos@tpg.com.au	0412 066 546

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Preparing hives for Spring

Spring cleaning and hive management

The main goal at this time of year is to help your bees increase the size of their colonies so that each colony is strong and ready for the 'Spring honey flow'.

Inspect, clean and repair all hive equipment

Bee suit

Ensure your bee suit is clean with no holes or torn seams remember bees can crawl into small spaces and get inside.

Boots

Ensure that your boots are cleaned regularly to stop the spread as pathogens – fungal, viral or bacterial.

Hive tools

Locate all your hive equipment and clean any equipment used in the hives. Organise a bucket or carrier for all items for ease of carrying. Have a spare bucket ready to collect any wax or debris from the hive.

Boxes and frames

All outdoor timber products require regular maintenance to prevent dry rot. Always keep a spare box to enable painting and repair of hive boxes. Before putting the box back in use, use no-more-gaps in all corners to reduce spaces for beetles to hide.

Comb management: plan to remove any old, thick, gnawed and broken combs from the hive as both Chalkbrood (fungus)and Sacbrood (virus) can lie dormant in the old frames and reinfect the hives.

Inspection and management of the hive

Bee numbers

Following winter bee numbers may be down depending on the activity of the queen.

With low bee numbers hives are more at risk of opportunistic pests such as small hive beetles and waxmoth. Additional boxes should not be added until bee numbers increase.

Honey supplies - the super

Honey supplies become critical to feed both the larvae and the adult bees until bee numbers and nectar supplies increase. The bees will require one comb of honey as well as an amount of pollen to produce one comb of brood.

A colony with less than two well-filled combs of honey could soon be threatened with starvation when brood is being raised.

Feeding options if needed:

- White table sugar sprinkled on the top of the frames
- Sugar syrup fed via a bottle feeder or bag.
- Small colonies can be given one litre and large colony up to three litres.

Check regularly to see how much food is stored, and stop feeding when nectar becomes available.

Combs of honey can be taken from hives that have excess supplies. But be sure both donor and recipient are free from all brood diseases.

Never feed extracted or supermarket honey to bees.

Always be aware of robber bees when feeding your bees. Best to do his in the evening when foreign bees go back to their own hive.

Only add another box on a hive when the bees are bubbling up above the frames when the hive is opened.

Brood box inspection - the brood:

- Important to check the egg laying performance of the queen
- The brood pattern should be regular with eggs larvae and sealed brood.
- Drone pupae in worker cells are bullet shaped unlike those of worker brood which are slightly convex
- Look for diseases such as chalkbrood, sacbrood, AFB and EFB

The queen:

- Drone pupae in worker cells can be evidence of a drone layer queen – this occurs if the queen is infertile from either poor mating or old age.
- The queen must be observed to ensure that she is not injured and that she is present in the hive.
- An old queen should be replaced with a new fertile queen from a reputable queen breeder.
- If the queen is not present the hive may be queenless and the problem may be a laying worker.
- Are there any queen cells in the brood?
- If the queen cells are low in the frame, this may be evidence of swarming.
- If the queen cells are on the sides of the brood, this may be evidence of supercedure, i.e. replacing the queen.
- If the queen cells are placed randomly, this may be bees experimenting, and the bees will pull them down.

Laying workers:

- When the hive becomes queenless and the hive has not raised a new queen some workers will develop ovaries due to the lack of both queen and brood pheromones.
- The brood pattern of a laying worker is irregular, the eggs are placed down the side of the cell and often more than one egg is laid per cell.
- These workers will be infertile so the eggs of these workers will always produce drones.
- A colony weak resulting from a drone layer should be united with another colony after first removing and destroying the drone layer.
- Colonies with a laying worker are difficult to successfully requeen.

Pests:

- **Small Hive Beetle** - Check for small hive beetle and larvae – on the comb or if a brood cell is raised above the rest it may be evidence of SHB in the cell. (Refer to the article published with the June 2021 Newsletter)
- **Waxmoth** – a trail of webbing across the comb is evidence of larvae and can easily be removed or cut out if more extensive. Any pupae should be removed and burnt. (For more information refer to the Prime Facts produced by the NSW DPI on the website – 'Useful articles for members')
- **Robber bees** – attempt to steal honey from hives, extracting equipment or exposed stickies. They hover around the hive entrance and appear nervous. They target weak colonies that are unable to fully defend themselves. The guard bees are overthrown and in severe cases the hive will be robbed of all the honey leaving the colony to starve. Robbers are aggressive and may attack nearby people and animals.
- Prevention is always better than cure.
- Good hive management by keeping the apiary clean with no exposed stickies, wax scraps or any other sticky items. Reduce the width of the entrance of hives under attack and avoid using smoke as this disturbs the guards and they are unable to defend their hive.

Diseases:

- **Chalkbrood disease** is caused by the fungus Ascosphaera apis.
    - Beekeepers should replace diseased combs which can act as a reservoir for chalkbrood disease spoors.
    - Clean away all mummified larvae from bottom boards and around the entrance of the hive
    - Hives should be well ventilated in a dry area with the sun facing the entrance. (For more information refer to the Factsheet from Plant Health Australia on the website- 'Useful articles for members').
- **American Foul Brood (AFB)** is a spore-forming bacterium, Paenibacillus larvae var larvae.
    - The spores can remain viable for at least 40 years, and resist boiling and dehydration.
    - The name does not represent the geographical distribution but from where it was first scientifically investigated.
    - AFB can be spread by robbing, feeding unsterilized honey or pollen, the use of contaminated beekeeping equipment or drift.
    - The test in the field for AFB is the rope test and then to cut out a piece of comb and forward it for lab testing.
    - It is a notifiable disease and the infected hive must be destroyed -all bees killed, frames burnt, and boxes irradiated.
    - (For information please refer to Prime Facts – NSW Department of Primary Industries – American Foulbrood Identification and Management on the website – 'Useful articles for members.)'
- **Sacbrood** is a viral infection of brood which kills few larvae but can become more severe.
    - The first signs of sacbrood are dead or dying larvae. The brood die soon after being capped but before changing to pupae.
    - Few hives die out as a direct result of sacbrood but many are weakened where they can succumb to other threats.
    - Larval remains that have recently died are highly infectious and yellow in colour. After two months they are brown and dry and not infectious.
    - Spread is believed to be by feeding the young larvae contaminated nectar, pollen or water. Nurse bees also become infected within the hive. Spread from hive to hive can be attributed to infected hive tools or natural causes such as robber bees or drift from hive to hive
    - Management – removal of old black combs annually and requeening infected colonies is recognised as a form of control of the disease.
    - Combs with more than 20% infected cells should be removed from the hive.

Swarm management

Swarming

This is how bee colonies reproduce. The swarm is made up of about half the adult bees and usually the old queen.

The impulse to swarm is strongest in spring and early summer.

After the swarm has left the hive a virgin queen will emerge from her cell and will kill any rivals still in their cells. She leaves the hive to take orientation flights and then mating flights. Some days later she will begin egg laying. Poor weather can delay this up to 20 days.

Swarming has a harmful effect on colonies – a major loss of adult bees and a break in the brood rearing cycle.

Action - After a colony has swarmed carefully examine all brood combs that the queen has had access to and destroy all but two of the largest queen cells. This ensures that the colony

will have the best possible replacement queen.

Signs of swarming

- Queen cells under construction on the lower and side edges of combs.
- Usually accompanied by a lack of comb space in the brood box and a high worker and drone population.
- Bees are more inclined to swarm when they are on build-up flora and storing honey.
- Congestion in the hive is a major cause of swarming.
- Colonies in single and nucleus boxes will swarm when they run out of room unless action is taken.

Prevention of swarming is a necessary part of good beekeeping

Minimise the number of drones. Remove combs with large patches of drone cells.

Destroy queen cells. At best, removal of queen cells only delays the swarm impulse. Examine the hive every seven to eight days and destroy all queen cells and queen cups. Make sure no cup is missed.

Young vigorous queens play a major role in reducing swarming as they secrete more pheromones then old or failing queens do. It is ideal to requeen with young queens early in spring before swarming becomes a problem.

Another option is to kill the old queen and introduce a mature queen cell from another hive until a better queen can be introduced.

Bees inherit swarming impulse so do not rear queens from stock which tends to swarm

Congestion in the hive. Eliminate congestion in the brood nest and honey storage area.

Placing a super of combs or foundation on a hive will relieve congestion. However, most colonies will continue to expand and will soon need to be weakened or divided to control swarming.

Remove surplus honey and give as much comb foundation as the bees can work if there is a good honey flow.

Extract or give the honey to hives with less stores of honey as soon as it has been sealed.

In the brood nest, remove combs of sealed brood and give it to weaker colonies. This helps to equalise the bees in hives in the apiary. Ensure both the recipient hive and the donor hive are disease free.

Some combs of sealed brood can be transferred from the brood box to the super – giving the queen more laying room

Swap the positions of weaker hives with strong hives, but only during a nectar flow.

Division of colonies is artifical swarming

Refer to the article published in the July Newsletter 'Splitting your hive', available on our website under 'Useful articles for members'.

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