Townsville & District
BEEKEEPERS
ASSOCIATION
www.beesnorth.com.au
PO Box 1115
Aitkenvale. Qld. 4814

**Newsletter No. 8:September 2025**

In this Issue:



**Next Meeting:**

**2pm Sunday 14 September 2025**

## Hermit Park State School

Entrance off McKimmin St

Bring a chair. Tea, coffee and nibbles available.
Free chats with experienced and novice beekeepers.
Sonya will be demonstrating the many uses of beeswax - wraps, soaps and other items

## *The new normal – varroa mite in Queensland*

On 3 March 2025, Varroa destructor was confirmed in Queensland for the first time. Five months later, the pest has been reported in 10 council areas from the Gold Coast to Quilpie and north to the Burnett region. No exotic bee pests or viruses have been found.

Currently there are more than 130 infested premises in Queensland. Some beekeepers may now be on their second round of treatments, depending on mite numbers. This means the rotational use of mechanical, cultural and chemical options is the new normal for these beekeepers.

Anyone with a hive should be checking for mites monthly and reporting their results to Bee 123, even if no mites are found.

For support from your local varroa development officer,
email varroa@dpi.qld.gov.au

Carla Kersnovske M: 0467 236
135 E: carla.kersnovske@dpi.qld.gov.au
W: www.dpi.qld.gov.au
Varroa Development Officer (National Varroa Mite Management Program), Biosecurity Queensland


**For more information about varroa mite in Queensland:**

- head to www.dpi.qld.gov.au/varroa.
- email varroa@dpi.qld.gov.au
- subscribe to the bee e-alert.

It's important to remember that support is available from our varroa development officers. They are on hand to provide free advice to all Queensland beekeepers and assist with early detection and integrated pest management. Email varroa@dpi.qld.gov.au

As your local VDO, Carla is available for workshops, one-on-one training and demonstrations. Another option may be to get a small group of like-minded beekeepers together and we can discuss as a group, what we would like to do as a collective in the future.
Feel free to reach out to Carla by calling 0467 236 135 or emailing carla.kersnovske@daf.qld.gov.au

***Do the alcohol wash and check for these blighters!***
Contact Carla or Rob Stephens immediately if you see any Varroa.
**Rob Stephens** Plant Biosecurity & Product Integrity
**M** 0407 374 232 **E** robert.stephens@daf.qld.gov.au

Fill in the Bee 123 form even if you don't see any mites – a negative result is what we all want to see.
The areas of infestation can be seen on the varroa mite surveillance map.

For further information regarding workshops in other regions of Queensland, please contact us via email at varroa@dpi.qld.gov.au

Regards
Carla Kersnovske M: 0467 236 135 E: carla.kersnovske@dpi.qld.gov.au W: www.dpi.qld.gov.au
Varroa Development Officer (National Varroa Mite Management Program), Biosecurity Queensland

## *Members stories – send me news from your backyard, we want to hear*

### *The answer is not 42 - How much honey do you get from a hive?*

**Lindsay Trott and Ray Berkelmans**

One question we often get from newbees, and the public at large, is: "How much honey do you get from a hive?" When I (RB) asked that question 14 years ago on my beekeeping debut, I was told "about 50kg per hive per year, give or take".

Well, how much "give" and how much "take"?

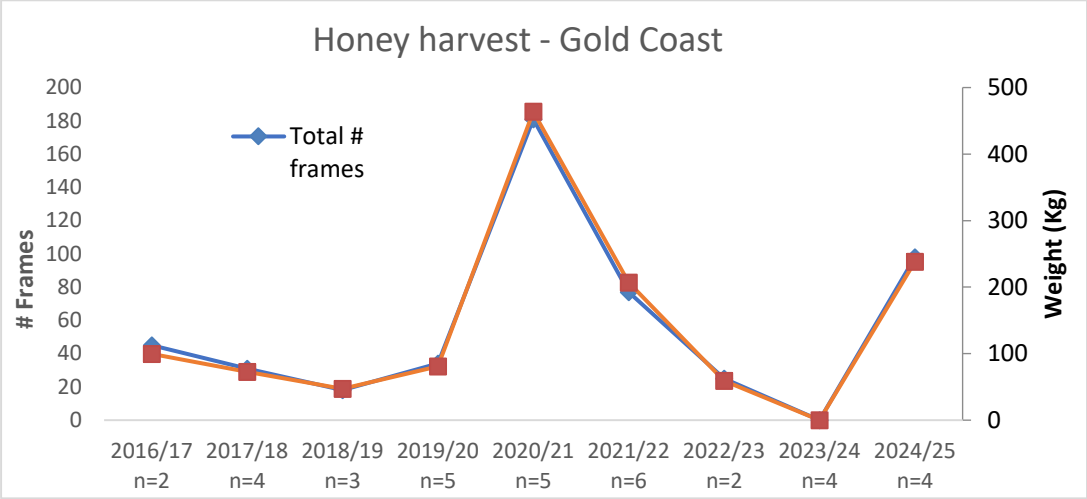
Since we have both kept detailed records of our honey harvests over the years, and we have a few years under our belts, we thought we'd try and answer this question, at least from our experience. We present our data individually as we live in different cities (LT: Townsville, RB: Gold Coast) and honey production is a notoriously variable thing anyway!

**Gold Coast (2016 – 2025)**

I (RB) started beekeeping in Townsville in early 2011, but moved to the Gold Coast in mid-2015. I sold up completely in Townsville before I left and started again on the Gold Coast in 2016. My bee seasons are financial years, since my bees naturally have a slow period over winter.

| | Total # frames | Total kg honey | # hives | Av per hive (Kg) |
|---|---|---|---|---|
| **2016/17** | 45 | 99.7 | 2 | 49.9 |
| **2017/18** | 31 | 72.6 | 4 | 18.2 |
| **2018/19** | 18 | 47 | 3 | 15.7 |
| **2019/20** | 34 | 80.9 | 5 | 16.2 |

| | | | | |
|---|---|---|---|---|
| **2020/21** | 181 | 463.7 | 5 | 92.7 |
| **2021/22** | 77 | 206.9 | 6 | 34.5 |
| **2022/23** | 25 | 59 | 2 | 29.5 |
| **2023/24** | 0 | 0 | 4 | 0.0 |
| **2024/25** | 98 | 238 | 4 | 59.5 |
| | | **Overall av. per hive** | | **35.1** |



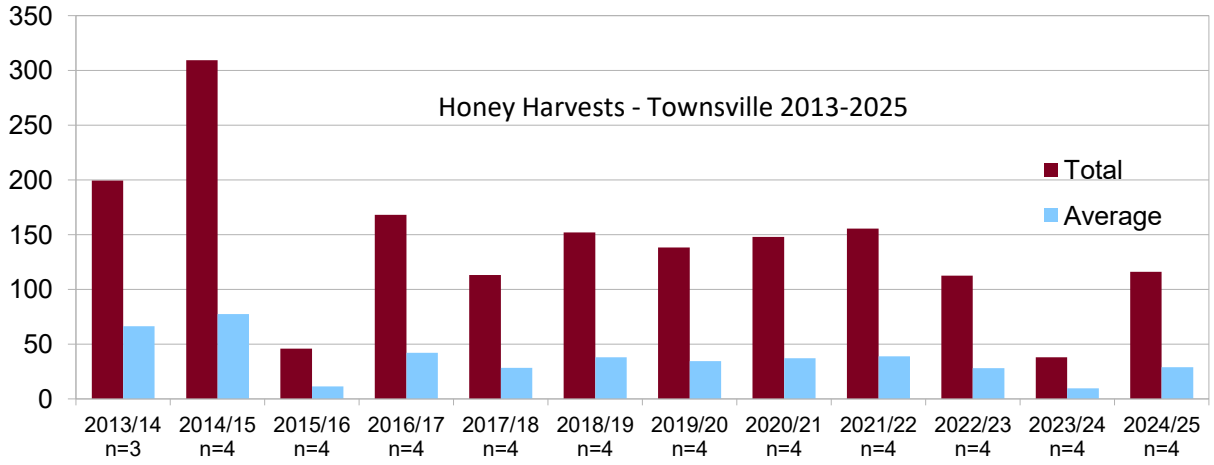

As you can see, my honey harvest has been highly variable over the years, ranging from sweet nothing (from 4 hives in 2023/24) to a whopping 464kg (from 5 hives 2020/21). During the bumper year of 2020/21, one of my 5 hives was a new swarm I caught and it only produced 4 frames of honey that season, so technically it was only 4 hives that produced this amount of honey – so, on average, that's 116kg per hive! I was harvesting frames every few weeks, 181 frames in total! So what made that year so good? Honestly, I have no idea. Everything just seemed to be flowering and as soon as one tree finished another would start. This went on from September to February. However, I can tell you what lead to the dismal zero honey harvest in 2023/24. The 18 months leading up to this period was quite wet and the soil consistently moist. This lead to a build-up of small hive beetle (SHB) which eventually wiped out two of my 5 hives. I lost another to American Foulbrood (AFB), and finally, the remaining two got washed away in a flood in February 2022 after a week of torrential rain (660ml) which caused the Nerang River to rise rapidly. 2023/24 was a year of re-starting with nucs and slowly building them up.
All up, the average over 9 seasons on the Gold Coast is 35.1 Kg per year, helped by three good years and offset by four 'poor' years.

### Townsville (2013-2025)

I have had backyard hives for 12 years, and like Ray, I have had some bumper years and some lousy years. Queenless hives, slime out, chalkbrood, torrential rain periods, hives tipping over, workers becoming drone layers etc etc contribute the variability. My overall average (36.7 kg /hive/yr) is surprising similar to Ray's (35.1 kg hive/yr).
I have arranged my data into financial years like Ray, so the comparison can be on similar seasonal time frames.

| Year | Total kg honey | Average per hive (kg) | # Hives |
|---|---|---|---|
| **2013/14** | 199.5 | 66.5 | 3 |
| **2014/15** | 309.3 | 77.3 | 4 |
| **2015/16** | 46 | 11.5 | 4 |
| **2016/17** | 168 | 42.0 | 4 |
| **2017/18** | 113 | 28.3 | 4 |
| **2018/19** | 152 | 38.0 | 4 |
| **2019/20** | 138.4 | 34.6 | 4 |

| | | | |
|---|---|---|---|
| **2020/21** | 148 | 37.0 | 4 |
| **2021/22** | 155.4 | 38.9 | 4 |
| **2022/23** | 112.5 | 28.1 | 4 |
| **2023/24** | 38 | 9.5 | 4 |
| **2024/25** | 116 | 29.0 | 4 |
| | | **Overall av. per hive 36.7** | |




So there you have it: the answer to any newbees question – how much honey do you get from a hive?

**<u>Around 35 kg/hive/yr</u>** – based on 21 years of accumulated data from 2 sites.

Cheers from Ray and Lindsay (The Ed)

Here's a couple of stories from some years back- from Ray Berkelmans and Lindsay Trott "The Ed"

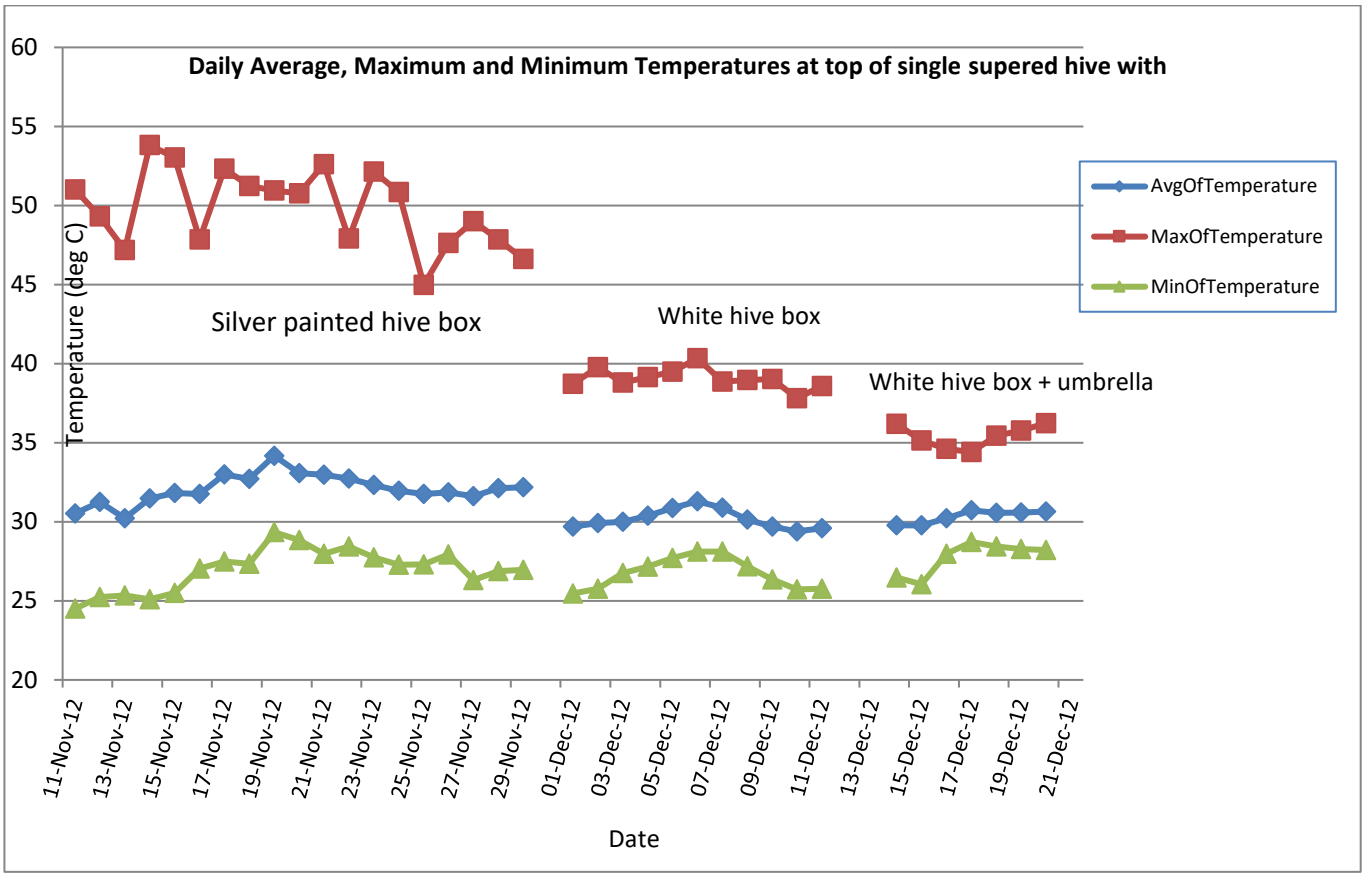
## *The Amateur Beekeeper*

Some like it hot – but white boxes and shady spots are a lot cooler
I am told the optimum interior temperature for a bee hive is around $35^0$ C with only a +/- $3^0$ C variation. Townsville's hot weather highlights the need to take care with the location and colour of our bee hives. Even before Xmas things heat up, and I decided to test whether white hives were cooler than darker silver painted hives: and the proof is very much in the data obtained from a temperature logger installed in the top of the super (thanks to Ray Berkelmans).

To test the difference in hive temperatures, the entire hive contents (brood frames, bees and super frames) were simply taken out of a silver/grey painted hive and replaced into a nicely painted white hive (with unblocked vents). After that, I secured a gents brolly to the side of the white painted hive to provide a little shade in the middle of the day (see photo).

Hive with brolly for shade

Are the bees happier, more productive, less stressed, healthier now??? I don't know, but the maximum temperature dropped by $12^0$ C, from $52^0$ C to $40^0$ C just by changing the colour of the hive boxes. A further drop in the maximum temperature of almost $5^0$C, from $40^0$ C to $35^0$ C was achieved just by placing a brolly over the hive as shade from the midday sun. It's worth considering the colour of the hive and some shade from the sun if you want to provide the optimum conditions for bee and honey production in the sunny North.




## *You keep me spinning around*

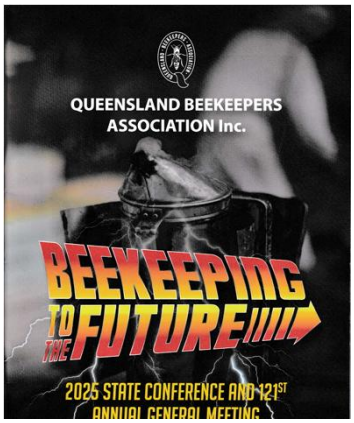
**From The Ed**

Spinning the frames – kids, don't try this at home!.

Faced with the prospect of not having any honey to give away for Xmas presents some years back because I had no access to a frame spinner, I came up with a neat substitute – at least it seemed a good idea at thetime. Solution! – place frames in strong sealed plastic bags and pop them in the washing machine on a short low spin cycle.
It worked!!! – the honey left the frames alright- but so did the wax support and the plastic support, and the frames were a bit buckled by the centrifugal force. I retrieved the honey, from the bags, discarded the broken honeycomb, repaired the plastic support, washed out the machine, and didn't tell Mum why her washing machine smelled so sweetly of beeswax and honey.

The principal is good, but you need a much slower speed than is available on the machine.
Cheers
The Ed

## *From the TDBA President*




**QBA Conference Report.** Overall, the conference was an excellent opportunity to meet with others, especially committee members from clubs like ours to see how things work in their clubs. We got some really useful information and advice.
The following link (QBC Conference Report) will take you to my notes on the various topics, as well as the QBA President's report.
Happy Beekeeping
Frana

## *TDBA President's report*


**Events-wise**, it was another busy month for club members. We've distributed unpainted native bee hotels to four centres in order for them to paint them before we populate them. The first of these is being installed early September, check out the artwork!

The **Bluewater Garden Club expo** was held on 16 August. It was very well attended and was a perfect day for a gardening and flower show! The sun was shining and the Bluewater Community Centre ground was filled to the brim with enthusiastic gardeners. The bee club was fortunate to be able to set up a display amidst the throng and we had a very busy day talking about both honey and native bees.
A huge thank you to Alex, Alan, Ron, Doris, Beryl, Mark and Maria for volunteering on the day! Really was a great day!

Frana attended the **Goodstart ELC in Kelso**, giving two presentations to the under-fives. They were fascinated by the live bees in the display box and the Educators said they hadn't seen the children engaged for so long.

Elliot Springs workshop was the next event, we scheduled this in place of the Pineapple Festival, installing two native beehives and conducting a workshop for the local residents. While attendance was very low, those that did come along stayed on for a long while discussing all things bee related.

Jon and I attended the **Castle Hill Lions Club dinner meeting** and gave an 'adults only' talk on honeybee behaviour which was very well received. The Lion's club buildings are very close to our shed and would be perfect for our use if they ever gave them up.

**Grants update** - We've been able to finalise the LendLease grant (Elliot Springs hives) at last and are still working on distributing books to ELCs and establishing native bee colonies as per two other grant requirements. We're awaiting funds from a successful Bravus grant and have applied for a DPI grant around varroa mite management.

Recently, Jon and I had the opportunity to visit the Sunshine Coast beekeepers club house at Yandina. This venue is on land provided by the local council and the buildings funded almost entirely from community grants. They have a hive compound at the rear, a dedicated honey room, solar power, air-conditioning and security. Its amazing what is possible with a dedicated team at the helm.

Native bee colony – have a look at this text-book perfect colony. Tetragonula hockingsi, the brood separated perfectly in two halves and the honey super was well-filled with pots. We got about 500ml of delicious honey from this box.

To celebrate the end of winter, some of our members took off to Magnetic Island for the weekend. The Stage Door Theatre, sunset drinks at West Point, early morning walks, the Arcadia Bakery, Magnetic Island Brewery and the Picnic Bay markets were taken in by all concerned (except Jon – he caught up on his sleep).

There won't be a Presidents report next month, as so many of our members do, I'm taking off for a few weeks R&R, attending the Apimondia Conference in Copenhagen. So, over to the rest of the committee members to keep things going. Happy beekeeping to all.

Frana

## *From the Internet*

### Chinese Scientists Create Cyborg Bees That Can Be Controlled Like Drones for Undercover Military Missions

Seal Team Bee Researchers at the Beijing Institute of Technology have turned innocent bees into cyborgs that can be controlled via a 74-milligram insect brain controller. As the South China Morning Post reports, the controller pierces the bee's tiny brain with three needles and uses signals sent via electronic pulses to make it fly forwards, backwards, left, or right. According to the reporting, the bee obeyed these commands nine out of ten times. The researchers are hoping that the tiny cyborg

Read in Futurism: https://apple.news/AjMu5YM2HRHC8XXbBbia5jA

### Honeybee venom found to kill aggressive breast cancer cells

Honeybee venom has been found to induce cancer cell death in aggressive breast cancer according to new research by a team at the Harry Perkins Institute of Medical Research and The University of Western Australia.

Using the venom from 312 honeybees and bumblebees in Western Australia, Ireland and England, Dr Ciara Duffy tested the effect of the venom on the clinical subtypes of breast cancer, including triple-negative breast cancer, which has limited treatment options.

Results revealed that honeybee venom rapidly destroyed triple-negative breast cancer and HER2-enriched breast cancer cells. Dr Duffy said the aim of the research was to investigate the anti-cancer properties of honeybee venom, and a component compound, melittin, on different types of breast cancer cells.

***Dr Ciara Duffy***

"No-one had previously compared the effects of honeybee venom or melittin across all of the different subtypes of breast cancer and normal cells," she said.

"We tested honeybee venom on normal breast cells, and cells from the clinical subtypes of breast cancer: hormone receptor positive, HER2-enriched, and triple-negative breast cancer.

"We found both honeybee venom and melittin significantly, selectively and rapidly reduced the viability of triple-negative breast cancer and HER2-enriched breast cancer cells."

Dr Duffy said the honeybee venom was extremely potent and a specific concentration of venom could induce 100 per cent cancer cell death, while having minimal effects on normal cells.
"We found that melittin can completely destroy cancer cell membranes within 60 minutes," she said.
Melittin in honeybee venom was also found to have another remarkable effect; within 20 minutes it was able to substantially reduce the chemical messages of cancer cells essential to cancer cell growth and cell division.
While there are 20,000 species of bees, Dr Duffy wanted to compare the effects of Perth honeybee venom to other honeybee populations in Ireland and England, as well as to the venom of bumblebees.
"I found that the European honeybee in Australia, Ireland and England produced almost identical effects in breast cancer compared to normal cells," she said. "However, bumblebee venom was unable to induce cell death even at very high concentrations."
One of the first reports of the effects of bee venom was published in Nature in 1950, where the venom reduced the growth of tumours in plants. However, Dr Duffy said it was only in the past two decades that interest grew substantially into the effects of honeybee venom on different cancers.
In the future, studies will be required to formally assess the optimum method of delivery of melittin, as well as toxicities and maximum tolerated doses.
https://www.uwa.edu.au/news/article/2020/september/honeybee-venom-found-to-kill-aggressive-breast-cancer-cells

### New insecticide from gum trees

From The Australasian Beekeeper, Feb 2024 Vol 125

A new insecticide derived from Eucalyptus trees has been developed by a private Australian company in collaboration with CSIRO. There are some strange chemicals (beta-triketones) in Eucalyptus trees that are natural insecticides effective against a range of important agricultural and suburban pests, but is 5,000 times less toxic to bees than existing treatments. The CSIRO boffins were able to synthesise a variant of the insecticide for commercialisation and it has now been patented as "Flavocide". It is effective against whitefly, aphids, shield bug, mirid, planthopper – all these threaten food crops globally. "Flavocide" is a novel chemical and target pests will not have been able to develop resistance or immunity to it – yet. It could have a big future , as it is effective against malaria, dengue and Zika carrying mosquitoes. It has a reduced aquatic environmental impact - even at the highest concentrations used.

But wait – there's more! Flavocide looks like it's effective against **mites,** ticks, flies and lice in animals. Yes that word MITE stands out alright. Hopefully an Aussie invention to control Varroa, or at least treat it with something "natural" and relatively non toxic.

## *August TDBAI meeting summary*

The focus of the August meeting was on Small Hive Beetle traps. Ron showed several different styles of traps that are available from the club shop and discussion around the other methods of beetle control:

- Oil (or diatomaceous earth) traps that sit between frames, both disposable and re-usable
- Cassette style that sit on the base or on frames, these contain an insecticide paste
- Oil or DE trays that slide beneath the hive
- Chux cloth bundled, folded or rolled

Ron and Frana then showed how to make an inexpensive beetle trap using corflute, tape and a tube of insecticide paste or gel. Many thanks to Graeme Armstrong for supplying the prototype.

Silver bullet trap for oil or DE and a homemade chemical trap for SHB

## *Reminders for membership renewal are sent by email – now $35/p.a.*

Membership fees can be made electronically to:
Townsville and District Beekeepers
BSB: 633 000
Account: 141 466 078

**Please make sure you add your Surname or subscription number so that your membership can be signed off.**

## *Club Shop – now a shop, swap and stop – and sell*

We will have a gazebo set up with new items on show and a coffee machine, so call in or stay on after collecting your order. A great opportunity to ask questions about your bees, or just to have a chat. We will also have a Buy Swap Sell table, not limited to beekeeping items. feel free to bring things along.
Shoppers – log onto the website and place your order there: Accounts\Shop
Alternatively you can place your orders via email shop@beesnorth.com.au Shop opening is first Saturday of the month.

**Location:** 3/38 Rendle St, Aitkenvale
**Time:** 9am – 10:30am

Collection at other times by arrangement and when volunteers are available.
Email orders will be given priority and serviced – but walk in orders may be completed if time allows. Pre-order before midnight on the Thursday before shop opening time.
Email orders will be given priority and serviced – but walk in orders may be completed if time allows. Pre-order before midnight on the Thursday before shop opening time.

## *Welcome to our New Members*

Existing Club Members are encouraged to assist/mentor our Newbees. They have joined the cl
bees, so even if you only have limited experience, give them a hand if you can. Invite a Newbee to your hive
opening and discuss what's inside the box, let Newbees experience hive openings to become more confident, and you will learn more yourself by trying to explain what's going on in there.

## Wheen Bee Foundation

Keep up to date with the latest news and research from the Wheen Bee Foundation which is an Australian not-for-profit charity that promotes awareness of the importance of bees for food security and raises funds for research. Their newsletter provides very informative industry updates as well as education on bees. Check out their page and subscribe to their newsletter here

## *Subscribe to the Bee Aware e-newsletter and stay up to date*

The Bee Aware newsletter is an e-newsletter for beekeepers and growers of pollinator-reliant crops, or anyone else simply interested in beekeeping or the pollination of crops. Each newsletter contains the latest in news, research and development, as well as upcoming events relating to honey bee biosecurity and the pollination of horticultural and agricultural crops. Townsville features in Issue 52 due to the latest AHB and Varroa incursion.
***https://beeaware.org.au/subscribe-to-newsletter/***

## *Native bee Newsletter – join the group and check out some great info and photos*

The CROSS-POLLINATOR – Newsletter of the Australian Native Bee Association
Original articles, new information and news from the world of native bees. The Association has branches in Sydney, Brisbane, Wide Bay and Gladstone, but no Townsville branch?? Are there enough interested native beekeepers to get one "flying"?

Check out these sites:
https://australiannativebee.org.au/
https://www.facebook.com/Australian.Native.Bee.Association/
https://www.instagram.com/australiannativebeeassociation/

## *TDBAI Office holders and Committee for 2024/2025*

| Position | Name | Contact |
|---|---|---|
| **President** | Frana McKinstry | president@beesnorth.com.au |
| **Vice President** | Al Cooney | |
| **Secretary** | Liz Hennig | secretary@beesnorth.com.au |
| **Treasurer** | Louise Clark | treasurer@beesnorth.com.au |
| **Event Co-Ordinator** | Shandelle O'Reilly | |
| **Biosecurity Awareness Officer** | John Carr | |
| **Newsletter Editor** | Lindsay Trott | editor@beesnorth.com.au |
| **Assistant Editor** | Lesley Barr | |
| **Membership Officer** | Frana McKinstry | membership@beesnorth.com.au |
| **Shop Managers** | Ron Newitt & Mark Finn | shop@beesnorth.com.au |
| **Shop Assistant** | N/A | |
| **Librarian** | Beryl Smart | |
| **Website/social media Officer** | Brenden Driemel | |
| **Native Bees Representative** | Jon McKinstry | |
| **Committee 1** | Doris Newitt | |
| **Committee 2** | Maria Finn | |
| **Committee 3** | Greg Skellern | |
| **Committee 4** | Carla Kersnovske | |
| **Committee 5** | Blake Steward | |
| **Committee 6** | Wendy Aspery | |
| | | |

***TDBAI Committee is involved in many activities – can you lend a hand?***
Contact any of the Committee Members to find out how to get involved

***Swarm Contact List:***
Please advise Lindsay Trott editor@beesnorth.com.au or trottlindsay@gmail.com
Or: Lesley Barr lesleybarr@y7mail.com if you wish to be removed from this list.
Contact me with your name, phone number and suburb if you want to be added to the list.

**Swarm Collection – honey bees**
Alex Jenkins **Townsville to Rollingstone** 0459 472 166
Ben Taylor **Douglas, Riverside Gardens** 4728 4992 or 0428 186000
Sonya Verburgt **Gulliver** 0408 530 991
Sharene Dougall **Bluewater** 0415 426 903
Phillip Plant **Townsville, Ayr, Rollingstone** 0456191 000
Bruce Mogensen **Railway Estate/Idalia** – 0427 174 705
Liz Hennig **Northern Beaches** – 0409067 367
Ronelle Nord **Alice River, Rupertswood** 0417 752 622

**Native bee removal**
Bruce Warren 0413 395 928
Jon McKinstry 0401 014 948

**Nest Removals from houses, trees and other structures**
Alex Jenkins **Townsville to Rollingstone** – 0459 472 166

Phillip Plant **Townsville, Ayr, Rollingstone** 0456 191 000

Remember that Varroa is now in Qld and we don't want it up here – check those swarms.

***Editor needs your input – why not tell me your story?***
***Club Member Profile Questionnaire***

Send stories and pictures to :
Lindsay Trott: trottlindsay@gmail.com Or: Lesley Barr <lesleybarr@y7mail.com>
Name /HIN /Suburb /Native or/and European bees /No of hives/area of hive locations? Type of hives? / Type of foundation? /Beetle protection?
Year commenced beekeeping?
Who was your mentor?
Who is involved in your household?
Is anyone allergic/sensitive to stings?
What has been your biggest success? / failure?/ mistake?/ biggest lesson?
What would you do differently if you had to start beekeeping again after a disaster like fire/ AFB /Varroa /cyclone
Do you sell/barter/give away honey?
How much honey does your average hive produce?
Do you make any other products from your hives?
Do you volunteer for the Club at Open days, markets, school events, public displays?
Would you like to participate? Any stories you would like to tell? Attach photo please?
That's it!!!!!
Just fill it out and send it to me, and you will be a rock star in the Monthly Newsletter.
Please provide more than just a one word answer!! Cheers The Ed.

***Blooper of the Month?***
***Send me your blooper for totally anonymous recognition- honestly***