Townsville and District Beekeepers Association (Inc.)



PO Box 1115, Aitkenvale QLD 4814

www.beesnorth.com.au

Newsletter No 1, February 2022

In this Issue

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- Ray's hives take a smelly nose dive
- Myrtle rust spread by bees?
- Red Dwarf honey bee and mite found in WA
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- New Shop prices now listed on the website: http://www.beesnorth.com.au

Next Meeting:

Sunday, 20 February 2022 10:00 am

3/38 Rendle St, Aitkenvale

The Club Shop will open 1st Saturday of the month.

Please check the website for details

Club Member Profile: Beryl Smart - Chief Librarian

HIN: S1546 Suburb: Burdell

Interest: European & native

Number of hives: 1 European and 1 native

I have had European honey bees since 2015 and a native hive for just one year. The European is a Langstroth with Nuplas brood box and timber super. I mainly have plastic foundation. Beetle protection is a Hive Doctor base, and I also have silver bullet trap on the super. Touch wood I don't see many SHB (Small Hive Beetle).

My mentors were John and Frana who have an unbelievable knowledge base and help so many newbies. I have also had help from Mick and Naomi when I was recovering from surgery last year and was not supposed to do any lifting. Many other club members have also provided helpful advice and I am always learning just by conversing at meetings and club activities.

Mainly due to inexperience, I lost my first hive after a couple of years to chalkbrood and wax moth, but mainly due to inexperience. The hive I have now, touch wood, is going great guns and in the past 12 months has given me 120kg of honey. Everyone tells me I should have at least 2 hives, but I am quite happy with one, mainly due to being on my own and having to do everything by myself, and as I get older I am finding it is hard work. I am trying to get my 19 year old grandson to help, but getting out of bed early is his biggest problem.



Beryl's hive in her narrow yard shows what you can achieve with just a little bit of space. Hope the neighbours like bees!

I have made many mistakes, mainly due to inexperience, and I think my biggest success was capturing my bees when they swarmed. It was an amazing experience and feeling of achievement when they all walked into the nuc. Unfortunately, the remaining bees which were left in the hive swarmed the next day and I wasn't able to capture them.

My advice to anyone wanting to keep bees would be to first join the club and find someone to mentor you. Help them tend their hives and learn as much as you can before taking the big step of getting your own. I wish I had done that.

Another piece of advice would be to be patient, especially with lighting the smoker. More than once I have had the smoker go out mid inspection because I was in a hurry.

I give my honey to family, close friends and immediate neighbours and sell the remainder through Facebook. I have made wax wraps and attempted creamed honey which was not very successful. I have been the Club Librarian for about 3 years and enjoy the role and interaction with club members, especially newbies looking for good books for beginners.

I volunteer at most club events and help at the Club Shop whenever I can. I think it is very important to get involved and would like to see many more members doing this. The club is only as strong as it's involved members and unfortunately it is usually the same handful of members doing all the work.

Thanks Beryl

Who's up next on the Club Member Profile? Send in your Profile to The Editor





Look at these beautiful brood frames in Beryl's hive.

I can see white, clean, new wax with thin walls, and pearly white larvae.

This is what you want to see in the brood box, along with eggs and capped larvae- and maybe the queen if you are lucky.

Don't know what to look for????, come along and get a bee mentor to show you, or arrange for a hive visit when a Club member is opening their hives.





Ray B battles some bee diseases on the Gold Coast

Avid TDBAI Newsletter readers will remember the glowing stories of Ray B down on the Gold Coast reaping hundreds of kgs of honey late last year from his 5 hives. Well, your travelling Editor paid him a visit to see if he could learn some of the secrets of the big production methods. But instead I learnt that the fortunes of bee hives can go belly up, even with the best care from beekeepers. So, it seems not everything in Gold Coast honey land is so sweet this summer.

In October, Ray detected AFB in one of his hives, and so he destroyed that hive including the bees, the boxes, frames, and gear (including the new suits and gloves he bought for his offsider helper). When I arrived to check one of Rays hives with him, we found a blackened entrance and no bees flying from one hive?????. Upon opening up we discovered a total slime out that had deposited so much goop down through the brood box that it had blocked the entrance, and everything inside – bees, wax, honey and goop had gone seriously, gaggingly "off" in the summer heat. Ray had checked the hive only a couple of weeks earlier, but the SHB must have been waiting in the wings to pounce when he went off for his Christmas lunch. Check out these photos of piles of dead bees inside the hive, crawling mucky fermenting mess inside the hive, and the blocked and blackened entrance that confronted us.









The Ed: Sunshine Coast beekeepers have also been experiencing AFB this season, with call outs for assistance to deal with the aftermath. Some beekeepers have also been struggling to get some jelly honey out of their frames. Jelly bush honey is from *Leptospermum polygalifolium*, while Manuka (*L. scoparium*) suffers from the same sticky problem. See the article below about "jelly" honey.

Thixotropic honey gels in the comb

From Rusty at the Honeybeesuite webpage https://www.honeybeesuite.com/

https://www.honeybeesuite.com/thixotrophic-honey-gels-in-thecomb/?fbclid=lwAR03_NDfWfoHvgVEEZHWdcfyqCtktlN1Z4A6V3ijHHNoOrqYn-qWk0xZPCc Manuka flower (Leptospermum scoparium)

Flickr photo by iamNigelMorris.

Thixotropy is a property of certain fluids—including honey—that results in changes in consistency. These fluids are gelatinous when undisturbed but become liquid when they are shaken or stirred. If left to rest, they will revert to the gelatinous state. Several types of honey are well known for being thixotropic. Among them are manuka honey (*Leptospermum scoparium*) from New Zealand and southeast Australia, ling or heather honey (*Calluna vulgaris*) from Europe, and grapefruit honey (*Citrus paradisi*). It is believed that certain proteins are responsible for this behaviour in honey. Honeys that are high in protein (up to 1.9%) are more prone to thixotropy than others. Most honeys have only trace amounts of protein and so are unaffected.

While the nutritional properties of honey are not changed by this, the honey is difficult to extract. A regular centrifugal extractor often won't work unless the honey is agitated first. To do this, a number of inventions have appeared, including a device that inserts vibrating pins into every cell. Once vibrated into liquid, the frames are transferred to a regular extractor. Since this method is expensive and time-consuming, much thixotropic honey is pressed from the comb. Although this destroys the comb, the wax can be used for other purposes. Alternatively, thixotropic honey can be sold in its natural state as comb honey.

Honeybees collecting myrtle rust fungus – is this pandemic panic buying at the pharmacy?

From The Editor

The Ed has been staying on the Sunshine Coast over summer to avoid all that Townsville heat and humidity – and that decent "tropical dollop" of rain. While here, I noticed a *Syzygium jambos* (Rose apple) suffering from a serious fungal infection on the new leaves from myrtle rust, which is a threat to many Australian native plants – eucalypts, lilly pillys, callistemon, tea tree, and even manuka plants. There is no effective treatment for the disease apart from removing the entire tree and disposing of infected plant material in a "Biosecure" manner – whatever that means for a 15m tree.

I observed many European honey bees buzzing around the infected leaves, and the bees had overloaded pollen baskets with bright yellowy-orange material, the same colour as the fungal infection. I wondered - Are these bees self medicating with a fungus that has beneficial effects in the hive? We know that there are several fungal products in development that have been demonstrated to improve the health of bee hives, for example for fighting off viruses - https://www.sciencedaily.com/releases/2018/10/181004100044.htm, and preventing CCD - https://tungi.com/pages/bees.

So, was I observing bees doing their own panic pandemic pharmacy shopping? They were certainly overloading their shopping pollen "baskets" with the orange stuff, and they seemed extremely active at buzzing where the fungus was growing thickly. No fist fights broke out at the checkout, thankfully.

A couple of questions;

- are these bees collecting fungal spores as means of self-medicating against a disease in the hive, or for some nutritional benefit?
- does this activity spread the infectious fungal disease further afield to the forest nearby?
- are European honeybees an unwitting vector in the spread of this new disease of Australian native plants?
- do native bees also collect the fungal spores and spread the fungus?







Photos show healthy and diseased Rose apple leaves, with a fungal spore laden bee in the top right corner, with her baskets chock-a-block.

PS: **The Ed** has just found scientific articles from NZ and Australia documenting the long lived viability of fungal spores collected by European honey bees and native bees. https://www.landcareresearch.co.nz/discover-our-research/biosecurity/ecosystem-resilience/beyond-myrtle-rust/news/honeybees-observed-harvesting-myrtle-rust/

Bad news for many Aussie plants in the Myrtaceae https://en.wikipedia.org/wiki/Myrtaceae

Why vented bottom boards from the Club Shop have sloping landing boards.



Landing is a crucial part of an insect's flight. This article will look at the moment before touchdown and the ensuing landing manoeuvres.

Bees' antennae are used to achieve a stable approach immediately before touchdown. As they approach the target landing, either a flower or landing board, they hover at a regular distance from the surface regardless of the angle of the landing surface.

In the final preparation for touchdown, it appears that they extend the appendage (antennae or legs) closest to the surface just before making contact. On horizontal surfaces or slightly sloping surfaces, they lower their hind legs. On vertical surfaces they use their front legs or antenna.

As bees close in on their target landing site, they slow noticeably until they are about 12mm from the landing surface, ten they come to a temporary halt and hover. They then lower themselves until the nearest appendage touches the surface. Once either the back legs or front lags touch the surface, they lower the rest of their body onto the surface.

So why do the club bottom boards have a sloping front if the bees land on the horizontal surface? It looks kind of neat. **Aesthetics!**

Jon McKinstry

What do tropical beekeepers wear under their suits?

Just like the Scottish blokes with their kilts, and not wearing any jocks, - only this is much cooler than that!

Rental van for collecting bee swarms?

Seen in Brisbane lately – just in case you need to hire a van to move bees.





Red Dwarf honey bee detected in WA

https://www.beeculture.com/red-dwarf-honey-bee-detected-in-australia/attachment/11022/



The Department of Primary Industries and Regional Development is responding to a detection of Red Dwarf honey bee in the Perth suburb of Forrestfield, calling on the State's beekeepers to check their hives for the pest.

The Department of Primary Industries and Regional Development is responding to a detection of Red Dwarf honey bee in the Perth suburb of Forrestfield, calling on the State's beekeepers to check their hives for the pest. A single swarm of the exotic bees was found on a recently imported sea container transferred to Forrestfield. The swarm was quickly contained and destroyed.

Comparing Size between European Honey Bee and Red Dwarf Honey Bee

Beekeepers with hives along the rail transport route between Fremantle and Forrestfield have been asked to inspect hives regularly and report anything unusual to the department's Pest and Disease Information Service (PaDIS). Chief Plant Biosecurity Officer Sonya Broughton said Red dwarf honey bee was native to Asia, and was a vector of bee diseases, parasites and viruses.

Dr Broughton said a single Euvarroa mite was confirmed on one of the detected bees, but this should not cause alarm. The mite reproduces on the drone brood of Red Dwarf honey bees and is not known to naturally parasitize our European honey bee. The Red Dwarf honey bee is a risk to European honey bee and native bees as it competes for floral resources. "This detection was very quickly contained, and we continue to conduct extra surveillance to protect our bee and horticulture industry," Dr Broughton said. "DPIRD surveillance activities have not detected any further exotic bees other than the original single exotic bee swarm."

Red Dwarf honey bees are social bees that live in colonies of approximately 3,000 insects and swarm readily. Dr Broughton said the bee was distinguished by its small size in comparison to European honey bees. "This exotic bee is just 7-10 millimeters in length and constructs small hives, usually less than 25 centimeters wide, consisting of a single comb," she said.

"The Red Dwarf honey bee has a red/brown abdomen with black and white bands. "It is important exotic bee and bee pests are reported quickly to provide the best opportunity to protect Western Australia's valuable bee and horticultural industries." Unusual bee or hive observations should be reported immediately to PaDIS using the department's MyPestGuide Reporter app, telephoning (08) 9368 3080 or email padis@dpird.wa.gov.au.

Beekeepers to monitor hives for Red dwarf honey bee (www.wa.gov.au)

Bees on the internet

A roundup of interesting articles on the internet about bees.

1. Bee aware: do you know what is in that cheap jar of honey?

British beekeepers call for stricter labelling on supermarket blends to identify the countries of origin.

British beekeepers are calling for a requirement on supermarkets and other retailers to label cheap honey imports

from China and other nations with the country of origin after claims that part of the global supply is bulked out with sugar syrup.



The UK is the world's biggest importer of Chinese honey, which can be one sixth of the price of the honey produced by bees in Britain. Supermarket own-label honey from China can be bought for as little as 69p a jar. Supermarkets say every jar of honey is "100% pure" and can be traced back to the beekeeper, but there is no requirement to identify the countries of origin of honey blended from more than one country. The European Union is now considering new rules to improve consumer information for honey and ensure the country of origin is clearly identified on the jar. https://www.beeculture.com/cheap-honey-whats-in-it/

2. Cheap plant chemical can help bees fight off viruses https://www.beeculture.com/plant-compound-helps-virus-infected-bees/

Sodium butyrate has been shown to assist in DNA functioning in bees that helps them fight off viruses.

3. Bee swarms convince Indian elephants to buzz off

Indian farmers are deploying bees to stop marauding herds of elephants destroying crops. The government in the eastern state of Odisha will place hundreds of beehives on the boundaries of farmland. The hives are linked by a wire which, when triggered by an elephant, will open the hives allowing swarming bees to attack elephants. As humans encroach on traditional migration corridors, confused and hungry elephants are forced to seek other routes, usually through farmland. Read in The Times of London: https://apple.news/Apf1H2NXERD-O7B6vSYTM5A

4. Is that a Varroa mite knocking at the door?

https://phys.org/news/2021-12-parasitic-honeybee-mite-jolts-hive.html

Apparently, varroa mites give off a ultrasonic vibrations while in the hive.

Using ultra-sensitive accelerometers—which have been able to detect vibrational waveforms originating from one individual mite—the team recorded the repeated knocking of the 1mm creatures, which they do by abruptly jolting their bodies.

The researchers are the first group in the world to capture such vibrational waveform from a mite of any species, which can also be heard as an audio track when driven through speakers.

Varroa mites—which cannot see or hear and weigh about half a milligram—live in honeybee colonies in most parts of the world and feed on adult bees and larvae, passing on a variety of viruses to their hosts and play an important role in the destruction of colonies.

The researchers were looking for vibrational traces coming from honeybees that may be infected but found unexpectedly that the individual mites were providing measurable vibrations of their own.

The vibration that occurs as a result of the mite's jolting is very short and rapidly produced—taking just 50 to 90 microseconds for the vibration to be transmitted—and the features of the signal vary strongly depending on the material the mite is stood on, providing a 'signature' of the substrate.

5. 'Fragile' leatherwood flowers after dry spell have Tasmanian beekeepers on edge; Change.org FEB 7, 2022 —

"The whole forest is dry, the moss is dry," Mr Stephens says. "If you dropped a match, it would go like a bonfire and it wouldn't stop. I'd hate to see a fire in this area because once a leatherwood is burnt out, it's finished. "Arrowsmith was burnt out in 1956 and not one tree ever came back — not in our generation anyway."

Rainfall is at historic low levels The west coast typically receives about 200 millimetres of rainfall every month of summer but weakening westerly winds have driven wet weather away from the region. The result has been rainfall "in the lowest 10 per cent of historical records", according to senior research scientist at the Bureau of Meteorology Andrew Marshall.

Ms Campbell says Tasmania has already lost "about 80 per cent of the leatherwood resource" since the 1960s. Due to irresponsible forestry and forest fires.

Remember the Shop etiquette

We are still in Covid-19 restrictions, please consider the welfare of all

Email orders will be given priority and serviced – but walk in orders may not be completed.

Pre-order by email before midnight on the Thursday before shop opening to shop@beesnorth.com.au; please do not send your order to info@beesnorth.com.au

Golden Rules for the Club Shop:

Please follow this guide:

- Order AND Pay by Thursday midnight before the opening day, by email: shop@beesnorth.com.au
- 2. Bring you order number and print out of the request with you
- 3. Arrive at the Shop <u>after</u> 9:00 am, pay for your order and **don't hang around inside the Shop to chat** too many people inside
 - 4. Non-emailed or late orders may not get any attention if the Shop is too busy.
 - 5. Please take your purchases and make room for the next shoppers, thanks

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://www.facebook.com/Australian.Native.Bee.Association/
https://www.instagram.com/australiannativebeeassociation/

Welcome to our New Members

Existing Club Members are encouraged to assist/mentor our Newbees. They have joined the club to learn about 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 newbies experience hive openings to become more confident, and you will learn more yourself by trying to explain what's going on in there.

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

The BeeAware 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/

Annual Membership Fees are due in July/August each year - currently \$30/p.a.

Membership fees can be made electronically to:

Name:- Townsville and District Beekeepers Association BSB:- 633000

Account: - 141466078

Refer :- Please make sure you add your Surname so that your membership can be signed off.

Email contacts for the Office Holders 2020/21

You can use these email contacts for the Office Holders, and hopefully they will have figured out how to access them and will respond ASAP. president@beesnorth.com.au, treasurer@beesnorth.com.au, shop@beesnorth.com.au,

And for all web and membership enquiries: info@beesnorth.com.au

TDBAI Office Holders for 2021/20222

President: Nick Smith Vice President: Mark Finn Secretary: Lindsay Trott

Treasurer: TBA

Treasurer's Assistant: Frana McKinstry **Treasurer's Assistant:** Mandy Thomas

Membership: Frana McKinstry: info@beesnorth.com.au

Newsletter: Lindsay Trott **Assistant Editor:** Dr John Carr **Librarian:** Beryl Smart

Webmaster: Mick Olsen/Nick Smith

Native bees: Nick Smith

Committee: Alan Ziegenfusz, Lisa Fenoglio Paul Payne, Sandylee Hutchison, Maria Finn, Dan Killoran, Doris Newitt, Naomi Olsen, Dr John Carr

Swarm Contact List:

Please advise editor@beesnorth.com.au 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.

Kelso/Kirwan: Steve and Carla Kersnovske - 0417 344 419 Graham Dalby - 0420951929 Michael O'Connell- 0402088080

Douglas/ Gulliver: Sonya Verburgt - 04 0853 0991

Alice River/ Bluewater: Sharene Dougall - 0415426903 Ronelle Nord - 0417752622 Duane Saltmer - 0400 339 508

 $Amanda\ Woodcock-0405784083$

Black River through to Rollingstone: Alex Jenkins - 0459472166

Aitkenvale: Pat Dury - mob 0419252829 Charters Towers: Mervyn Yule - 0427 124 126

Swarm List Please contact Biosecurity Queensland on 13 25 23 for any swarm or strange bee activity in the Townsville region. For all swarm collections, please collect 300 bees or roughly 10% of brood comb and submit to Biosecurity Queensland for pest and disease monitoring.

Newsletter Editor needs your input – why not tell me your story? Club Member Profiles

From The Ed.

The Newsletter Editor receives some wonderful stories and photos from some of our Members. And it makes our Newsletter a personal and relevant method of communicating our bee adventures with to all our Members, many of whom cannot get to the meetings or events. Some of these stories are amusing – like The Blooper Series (The Ed seems to feature in a lot of these), Product Reviews, stories from the many events, markets and school visits, information from our more learned members, news about workshops and open days, and so on.

I would like to include this section in the monthly Newsletter and to be about a different Club member each month, but it can only happen if at least 1 out of the 400+ members puts pen to paper, takes a snapshot and sends in the info to me at the Newsletter desk.

So, how about giving it a go? you don't even have to think about what to say. You just have to write in and embellish a little, tell me funny stories, successes, failures, problems and what beekeeping means to you. Go for it!! We would love to hear what you have been up to.

The TDBAI has over 400 members at last count.

Surely one or two are prepared to fill in a half page questionnaire and take a photo? If you cant write, and cant take a photo, then give me a call and I will come over for a cuppa and a chat and we will be able to extract a story with you for the rest of our Members enjoyment. Lets keep the Club Member Profile articles for the monthly Newsletter rolling.

Here's the questionnaire – fill it out and attach a couple of photos, including one of yourself and send to me mailto:: trottlindsay@gmail.com

CLUB MEMBER PROFILE QUESTIONNAIRE

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!!

The Ed

TDBA Bee Starter Kit - \$160

The Perfect Gift for a budding Beekeeper

Available in Townsville from the Club Shop:

Club Members Price Only! - \$160

Hive tool, brush, vented jacket/veil, gloves, and smoker

Plus: The ABC of Beekeeping book

Contact: shop@beesnorth.com.au



