

Townsville and District Beekeepers Association (Inc.)

www.beesnorth.com.au

PO Box 1115, Aitkenvale QLD 4814



Newsletter No 6, July 2021

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- End to Varroa Mite Eradication Program
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Next Meeting: *Note - Saturday not Sunday

*Saturday 17 July, 10:30 am

Dr John Carr's place
Park inside 25 Marlin St, Balgal Beach
Walk through to 25 The Esplanade

Bring a chair and something tasty. Tea, coffee, milk available
We will be using current COVID safe procedures, as appropriate
Free chats and discussion after the meeting

Club Member Profile

Michael O'Connell spills the beans on his love affair with his bees – and his renovated “Honey House” on wheels

I have mainly timber Langstroth hives, but will slowly phase them out for plastic Nuplas boxes. There are a number of reasons for this, over time the timber develops wood rot, they need regular maintenance eg. re-painting, repairing corners damaged by hive tools, wood expands and contracts, therefore the corner joints start to come apart, etc, etc.,

I use only wax foundation. I have tried plastic but had very mixed results, for me they are a bit hit and miss.

To combat Small Hive Beetle (SHB) I use silver bullets with vegetable oil. I bought some cheap black plastic ones on Ebay but don't like them as they can't be opened for cleaning. I'm thinking of putting condoms in the hives to catch the little suckers.

(Ed's note – I was not sure where this talk of condoms was headed, but decided to let Michael continue with the interview. I'm still not sure what SHB do with the condoms. I thought- maybe I was confused about his “Honey House” – maybe he said he was building a “House for his Honeys”).

I've been keeping bees now for about 6 years, was going to have just one hive, MAYBE 2? I think bee hives have a way of increasing exponentially. My mentors, Frana and Jon, (who else,) have been my go-to experts.

My biggest success, failure, mistake, lesson?. This is the most difficult question of all, where do I start? Ah so many mistakes. Some are just silly mistakes but some are total cluster f***s. Before I answer this let me first say “I have never failed!” You see, because every time I tried something and “failed” or made a “mistake” I succeeded in learning a few things, eg what didn't work, I then found ways to make it work. So you see, I take the attitude that I never fail, I only ever succeed. I know it sounds very arrogant. Think of it this way, with every “failure” comes success, think of Thomas Edison, “EUREKA!!!” I have stuffed up, big time, after all I am only human.

The very first time I used a “bee vacc” was a monumental FAILURE. Graham and I did a cut-out between the upper floor and the downstairs laundry ceiling of a house in Oonoonba. This colony had been there at least 2 years, and it was huge. We could have made perhaps 3 splits/hives out of it, as there were so many bees in it. We vacced and cut out, vacced and cut out, until we had all the girls, we went home feeling very chuffed with ourselves for doing such a good job, BUT when we opened the super the next day, TOTAL DISASTER!!! All the bees were dead. We had sucked up so much honey and vacced so continuously that all the bees were stuck on the back wall of the vacc box in a sticky honey ball. That was a big lesson, vacc a little at a time, go slow! Give them time to move away and don't suck up any honey.

Lesson learned! I recently did a cut-out from a wind turbine, took 2 days. (Will be sending the pics and story some time soon.)

Another failure -, Graham and I were relocating my hives to my new address when I tripped, lost my grip and BANG the hive hit the dirt. 1000's of VERY ANGRY bees everywhere, they chased Graham and Zulu, my dog, down the street for about 500 meters. I suppose it didn't help that they ran under the street lights, right???? PS this was November 2018, the season was in full tilt and consisted of a brood box and 2 supers and 100 million bees. Err, I mean the hive consisted of.... Not the season.

What would I do differently if I had to start over? I don't know, my brain hurts just thinking about it.

I give a lot of honey away to friends, family, my hive hosts get as much honey as they want for their personal use or to give to their friends and family.

I have helped out at various club events, eg beginner beek workshops, eco-fests, club shop, etc.. I do enjoy helping at club events, it's good fun and a nice social event.

I had everything set up for the Willows Sunday markets when Covid hit, but then never followed through with it. I used to sell at Carlyle Garden's markets, but once again Covid hit so I moved on to other things.

I bought an old 26 foot caravan which I have totally gutted and now slowly turning it into my honey-house, so that I can get all the bee and honey associated crap out of the house. I'm sick and tired of walking on sticky floors and blobs of squished wax.



Well beeks that's my story, what's your's? **Who's next?**

Michael's renovation on the trusty old Viscount Royal caravan being converted into his dedicated "Honey House". Interview and "Before and after" photos from Michael O'Connell.



Solar farms can benefit bees and other pollinators

Researchers assessing the impact of solar energy development across Europe have come up with ten ways in which the expansion of solar can be shaped to ensure pollinators benefit. Space-hungry solar photovoltaic (PV) is set to dominate future global electricity supply, but with careful decision making, efforts to secure clean energy need not come at the expense of biodiversity — particularly pollinators which are in sharp decline.

Bees, hoverflies, wasps, beetles, butterflies, and moths play a key role in food production, with around 75% of the leading global food crops and 35% of global crop production relying on them to some extent. But shading caused by rows of solar panels affects air temperature, rainfall, and evaporation which has a knock on effect on soil, vegetation, and biodiversity.

However, in the UK solar parks are often built in intensively managed agricultural landscapes and thus are poor for biodiversity. In this scenario, solar parks may in fact provide opportunities to establish hotspots of pollinator biodiversity which in turn can help pollinate local crops such as oilseed, strawberries and apples. <https://scitechdaily.com/ten-ways-to-ensure-pollinators-benefit-from-the-solar-power-boom/>

"Bigfoot" hive stand with double frame hangers

President Mick has knocked up a very cute bee hive stand for the Editor. This one looks like it will go well next to the garden gnomes in my yard.



Varroa Mite Eradication Program



Dear beekeeper,

As you may be aware, varroa mites (*Varroa jacobsoni*) were initially detected in a feral Asian honey bee (*Apis cerana*, AHB) nest at the Port of Townsville in June 2016. This incursion was declared eradicated in July 2020.

Two further feral AHB nests were detected at the Port of Townsville in May 2019 and again in April 2020. Both nests were confirmed to contain varroa mites and were destroyed. Since then, we have had no further detections but it is still important we remain varroa mite free in the Townsville area so we can declare this important pest eradicated from Australia.

Our staff will complete all operational activities associated with the 2019 and 2020 varroa mite detections, including managed hive inspections, aerial pheromone trapping, tracking of floral resources and analysis of pellets from rainbow bee-eater birds, at the end of April 2020.

Two biosecurity programs, a surveillance program and a prevention and control program, have been in place for the Townsville City Council local government area under the *Biosecurity Act 2014* since May 2019. These programs have included:

- surveillance to detect AHB nests and swarms
- monitoring of managed European honey bee (*Apis mellifera*) hives to verify they remain free from varroa mite
- a public awareness and education campaign to encourage those living and working within a 10km radius of the port to check for and report any suspect bees
- controls on movement of potential carriers of varroa mite from the Townsville area.

The two programs will remain in place until 30 June 2021. This will allow time for the National Management Group, who oversee national responses to outbreaks of Emergency Plant Pests under the Emergency Plant Pest Response Deed, to consider the proof of freedom report and declare eradication prior to the programs' expiry.

Beekeepers will continue to be required to notify DAF by email at varroa@daf.qld.gov.au at least seven days prior to the intended movement of European honey bees from the Townsville City Council area until expiry of the prevention and control program on 30 June 2021.

As the program draws to a close, I want to thank you for your continued support of the National Varroa Mite Eradication Program. Townsville apiarists have been integral to the eradication program's success and the vigilance of our local registered beekeepers in reporting feral colonies of honey bees and conducting self-assessment testing through sugar shake, alcohol wash and drone uncapping has been much appreciated.

The DAF Customer Service Centre will continue to respond to reports of Asian honey bees and managed hives showing symptoms of exotic pests after the eradication program finishes, and provide advice to members of the public on the removal feral bee colonies or swarms. The Customer Service Centre can be contacted on 13 25 23.

Further information about the program is available online at www.biosecurity.qld.gov.au.

Yours sincerely,

A handwritten signature in black ink that reads "Robert Stephens". The signature is written in a cursive style.

Rob Stephens
Program Leader, National Varroa Mite Eradication Program
Biosecurity Queensland
Department of Agriculture and Fisheries



Bees on the internet

A roundup of interesting articles on the internet about bees.

1. Kate Middleton loves bees!

<https://www.harpersbazaar.com/celebrity/latest/a36813907/kate-middleton-enjoys-honey-beekeeping-brother-james-middleton/>

But the really exciting news was revealed at the bottom of the article:

“For the occasion, the duchess wore a salmon-colored Chloé blazer, straight-leg jeans, a white Ralph Lauren top, and white Veja sneakers. She topped off the look with simple gold hoop earrings.” Jolly good show I say, pip, pip. I’m sure the bees were impressed.

2. Bees have learned to clone themselves <https://apple.news/AnNLtStXyRx6HenyIQPMKDW>

In 1990 a bee learned to clone herself - now her army of millions threaten other species

Over the past three decades, a single individual bee has successfully created millions of clones of herself thanks to hitting a bizarre genetic jackpot.

3. Bees have been trained to detect COVID-19.

Start-up InsectSense and Wageningen Bioveterinary Research have trained bees to extend their tongues when they smell the coronavirus. The coronavirus, like other diseases, causes metabolic changes in the body that causes a smell. Bees can be trained within minutes to recognize the scent of samples infected with SARS-CoV-2. Bees can detect volatiles with a sensitivity of parts per trillion. For example, they find a flower a few kilometres away. Bees, like dogs, can learn to detect volatiles and odors, but with just a few minutes of training. <https://www.beeeculture.com/catch-the-buzz-training-honey-bees-to-smell-covid/>

4. Beeswax in Space - Flight of the Bermuda Beeswax <https://www.beeeculture.com/catch-the-buzz-bermuda-beeswax-in-space/>

It’s not polluted, it is stable and it burns well – and it turns out that Bermuda beeswax could be the perfect fuel for satellites.

Scientists with MIT’s Space Enabled research group have been given a batch of the beeswax after being approached by the group’s leader, Dr. Danielle Wood.

Dr. Wood approached the Ministry of Home Affairs last year to see if she could get a quantity of Bermuda beeswax to use in her work.

Apparently, Bermuda beeswax is stable so doesn’t combust easily, but it is also a hydrocarbon so it burns well, providing just enough energy to reposition a small satellite.

“This initiative has put Bermuda’s beeswax on the map. We look forward to seeing the flight on May 20, where Bermuda’s beeswax will be burned.

“I want to especially thank the Beekeeping Association who contributed the consignment of beeswax, said Tommy Sinclair, Principal Agriculture Officer with the Department of Environment and Natural Resources.

5. U.S. honey still contains radioactivity dating back to the 1950s

Radio active Caesium 137, is a purely human made radio isotope derived from nuclear weapons testing and reactors and continues to appear in soil, marine sediments, plants and human tissue. It has now been detected in samples of US honey. The Caesium 137 is absorbed by plants because of its resemblance to potassium, and then appears in pollen and nectar. <https://apple.news/AxzTIDD4jQxGy4Obh3G44pA>

Iain Gordon has an addendum to his article on eDNA testing for Varroa

Cecilia Villacorta Rath is the JCU researcher working on eDNA.

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:

1. Order by Thursday midnight **before** the opening day, by email: shop@beesnorth.com.au
2. Arrive at the Shop **after** 9:00 am, pay for your order and don’t hang around inside the Shop to chat – too many people inside.
3. Non-emailed or late orders may not get any attention if the Shop is too busy.

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/>

AFB detected in Mysterton - The beekeepers are aware of their obligations.

TDBAI Club activities

“Our Townsville” event – report on our display from Dr John Carr

The club put on a very popular stand at the recent “Our Townsville” event in Anderson Gardens on the 6th June. The kids were fascinated by seeing honeybees working the honey and by a couple of hives of stingless bees. A lot of honey was sold to eager customers. The only downside one of us had to queue for coffee all the time as the hospitality stands were in short supply!



“Beetle buster” demonstration from the inventor Bruce Wallace

Report from Dr John Carr

A practical and fascinating demonstration of the ‘beetle buster’ technology using diatomaceous earth to immobilise the small hive beetle (A) which is persistent pest in our bee hives– both honey bees and our native bees. The meeting was at Frana and Jon’s using their hives as grateful recipients of th technology. Although on the day there were few beetles seen!



Discussion on the technology and science

Getting a hive ready for the beetles to be busted!

A face only a mother would love

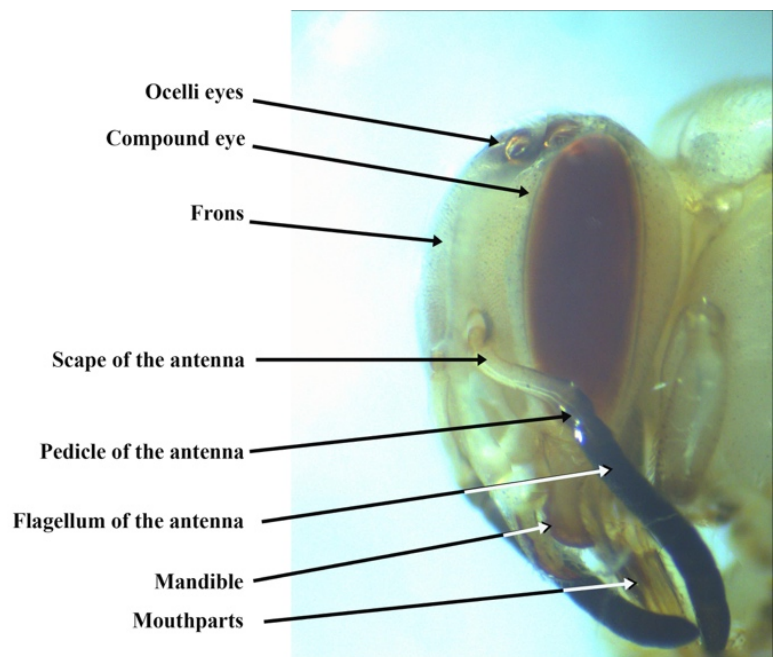
From Dr John Carr

When Stingless bees first emerge they are largely colourless and without a lot of hair and are called callows.

But this also allows for us to see ‘inside’ the bee until the hair fluffs up and hides some of the subtle details. Down the microscope the face of a callow demonstrates the fascinating structures of the bees senses the eyes and antennae.

This is just an excuse to show off a portrait of our fascinating companions.

If you have interesting pictures send them into the Editor



Bee anatomy workshop run by Dr John Carr

President Mick Olsen sent in some photos of the Bee Anatomy talk which was held on the 23rd of June and was a great success. John Carr pulled out all the stops to show us novices the anatomy of a bee, which happened to be Queens. This was an excellent night and certainly opened up my eyes to a more in depth world of the bee. I would highly recommend this night for any member as you will come away with a greater appreciation of the honey bee. What fortunate members we are, to have this expertise offered freely to all, may thanks John.



The very attentive class at the Bee Anatomy Workshop

John at his microscope showing the finer details of the innards of bees



General Meeting Minutes - Michael Hooper Park on 26/06/2021.

Note taker: Waldon Edwards

Meeting opened: President Mick Olsen (MO) opened meeting at 10:12 am

Visitors: New Members welcomed, attendance book signed

Previous Minutes: Previous minutes were noted – see Newsletter. No business arising from the previous minutes.

We were addressed by Helene, our liaison with Townsville City Council, who gave a history of events leading up to the signing of the lease on Michael Hooper Park. After the meeting Mick and Waldon were signatories to the lease on behalf of the Club. There are a number of finer details to be resolved regarding power, mowing, irrigation, toilets, fencing and surveying but the Club finally has a place to call home.

There is significant community support for what your Club is doing and having this site will enable the club to further interact with the community.

The lease is 5 years +5 years with 30 days notice to quit if we find a more suitable site.

A clubhouse on the site may be some time in the future but there are options regarding the purchase of a clubhouse in the immediate area.

General Business:

- Bee Anatomy Course – Wed 23/06/21 at the Club Shed 1
- Bushland Beach Markets – Sun 04/07/21
- Shop will be open the evening of Wed 7/07/21
- There are still some issues with emails.
- The club has adopted Microsoft 365 as it's provider of email and other services. Integration with the new website is ongoing.
- It is proposed to hold the club's Open Day at MHP in September – Date to be confirmed.
- Nick Smith of NQ Native Bees is a member of our club. He was amazed at the level of interest he received at the Bee Club stall at the Our Townsville event. High level of interest was shown for the bees also. Those who had their wares for sale on the day went home very pleased.

Treasurer's Report: Total Cash Assets \$42,702.07

Library: Beryl gave a run through of available titles.

Secretary: No report

Newsletter: Editor requested articles and local news.

Club Shop: Usually on 1st Saturday of the month at 3/38 Rendle St, Aitkenvale. E-mail your requests before Friday. Product of the month – Scraper - Reduced from \$12.00 to \$10.00. – Get in quick! It is getting rave reviews from even our crustiest members.

Announcements:

Waldon Edwards – Secretary – announced his resignation effective Mon 21/06/2021. Leaving Townsville for the Great South East.

Mick Olsen – President – Will not be seeking election for another term – The First Lady is retiring very soon and they intend to do some travelling for an extended period of time. Mick has indicated that he may offer his services on the committee once he recovers from the travel bug.

Frana McKinstry – Treasurer – Would very much appreciate a reduction in her workload. Her roles, Treasurer and Shop Convener, consume an enormous amount of time and it is time for others to put their hand up.

The club has in excess of some 450 members. These are family memberships so it is not unreasonable to assume that there are well over 1000 people who are impacted by the club's services to members. When you step up you would have the support of an experienced committee and other members who have served previously. Our new website also offers the opportunity to streamline a number of the club's activities. The club is entering an exciting phase of it's evolution and needs your support more than ever.

From The President, Mick Olsen: Biosecurity Queensland have donated some gear that was left over from the Varroa Mite Eradication Program that wind up this month, including gloves, jackets, veils and sugar shake test kits. All gloves, jackets and veils will be washed and bleached prior to being used by the Club. As the President I would like to personally thank Rob Stephens and his DAF team for all the work and the sharing of info during the time of the program.

Next Meeting - TBC

Meeting Closed: 11.10 am

Next Meeting: Saturday 17 July at 10:30 am at Dr John Carr's place – 25 Marlin St, Balgal Beach. Walk through to 25 The Esplanade.

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.

Craig Balnaves Jeffrey Graves Darryl Hancock Angela Gillham Brian & Rosie Schiappadori
Clodagh Blackburn Charmaine Snape Emma Kennedy Roslyn McGregor

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://beeware.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.

Sell/Swap/Buy/Help needed

I will list items for 2 Newsletters only, unless you let me know otherwise. Please drop The Editor editor@beesnorth.com.au a note to indicate whether the items are required to be listed for a longer period. Do you need help from a Club member with your hive? Let the Editor know, and your request will be posted here. Please include name, phone contact, and a brief description of the question/problem and how urgent.

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 2020/2021

President: Mick Olsen - president@beesnorth.com.au

Vice President: Iain Gordon

Secretary: Waldon Edwards

Treasurer: Frana McKinstry:

Treasurer's Assistant: Darren Hawkins

Treasurer's Assistant: Michelle Hasted

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

Newsletter: Lindsay Trott

Assistant Editor: Dr John Carr

Librarian: Beryl Smart

Webmaster: Ray Berkelmans

Publicity Officer/ Equipment Steward: Sandylee Hutchison

Committee: Shane Grist Sonya Verburgt Alan Ziegenfusz Ronelle Ward Tom & Joan Rudell Lisa Fenoglio Paul Payne

Next Meeting at Dr John Carr's place 25 Marlin St in Balgal Beach.

Saturday 17 June at 10:30 am

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

Magnetic Island: Tito Parigi - 0418 796 951

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 a new section in the monthly Newsletter. I am suggesting that this section 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 it? Its not too much is it?, I will give you the questions – a bit like an interview so you don't 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!!

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 start off the Club Member Profile articles for the monthly Newsletter. I am offering to do the first one next month to show you what I would like to receive.

Here's the questionnaire – fill it out and attach a photo and send to me [mailto:: trottlindsay@gmail.com](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

Club Shop Items - 2021 Price List

These prices are only available to current financial members

Starter Kit (Jkt,gloves,tool,smoker,brush,book)	160.00	Wax Embedding tool - roller	15.00
Jacket - Ventilated	90.00	Wax Embedding tool - electric	45.00
Full Suit - ventilated	115.00	Block beeswax, per Kg	25.00
Replacement veil	25.00	Eyelets pkt 50g	6.00
Cowboy hat with veil	12.00	Awl (for picking eyelets)	5.00
Veil	20.00	S/S Wire x 500gm	20.00
Childs full suit - ventilated	80.00	Crimping Tool	14.00
Childs full suit - cotton	60.00	Bucket Bracket	10.00
Vented Pants	60.00	Bucket Opener	10.00
Gloves - pair	25.00	Queen Catcher Clip	3.00
Veil - Native Bee	3.00	Queen Catcher / Marker tube	10.00
Super - 10 Frame, wood	30.00	Frame Gripper	10.00
Super - 8 frame, wood	28.00	Frame Hanger	20.00
Super - Ideal, wood	28.00	Bee Feeders	1.00
Super - WSP, wood	28.00	Spring clips, pair, with screws	5.00
Lid (10 Frame) unassembled	27.00	Spatula (blue)	10.00
Lid (8 or 10 Frame) pre-assembled	35.00	Gate valve - Nuplas	12.00
Base - Ply (8 or 10 frame)	22.00	Gate valve - Parker	30.00
Base - Mesh	35.00	Gate valve O rings - Parker	8.00
Mesh sheet (for base construction)	15.00	Uncapping knife	15.00
Lifting Cleats (Handles, pair)	5.00	Uncapping knife - electric	45.00
Hive Mat - 10 frame	9.00	Comb scratcher	10.00
Clearer Board - 10 Frame	26.00	Strainer	30.00
Nuplas Super (8 or 10 Fr)	40.00	Scales	12.00
Nuplas Super - Ideal	35.00	Extractor - 4 Frame S/S	530.00
Nuplas Lid (8 or 10 Fr)	38.00	Native bee boxes	100.00
Nuplas Base (8 or 10 Fr)	45.00	Bee Haven Native Beehive	420.00
Nuplas 10 Fr set: 1 x super, lid & base	120.00	Honey jars 250gm	0.70
Nuplas cleats (Handles, pair)	10.00	Honey jars 500gm square	0.80
Nuplas oil tray & frame	28.00	Honey Jars Squeeze 550g	0.80
Hive Doctor plastic base (8 or 10 frame)	55.00	Honey Jars 1 kg	1.00
Beetle Buster base (8 or 10 frame)	110.00	Honey Pails - 1 kg	1.20
4 Frame Nuc Box	65.00	Honey Pails - 1.5kg	1.30
5 Frame Nuc Box	70.00	Honey bottle 2.8kg (2 litre)	0.80
Corflute Nuc boxes	28.00	Glass Jars 500g	1.00
Hive tool (S/S)	15.00	Bucket - 20 Litre	12.00
Smoker	38.00	Apithor trap	8.00
Smoker - Beeco	110.00	Silver Bullet trap	8.00
Smoker Fuel (1kg)	5.00	Diatomaceous Earth	4.00
Bee Brush	10.00	Guardian Bee Hive entrance (red)	15.00
Emlok - hive clamp	14.00	ABC of Beekeeping in Tropics	25.00
Hive Handle (galvanised, pr)	12.00	Australian Beekeeping Manual	35.00
Queen Excluder - Wire (8 or 10 frame)	22.00	Australian Native Bee Book	25.00
Queen Excluder - Plastic, 10 frame	12.00	Inside the Hive	5.00
Queen Excluder scraper	10.00	Bees Knees	20.00
Frames - Full depth	2.00	Honey Labels (250/roll)	30.00
Frames - Full depth, prewired	4.00	Nutrition Panel labels (per roll)	30.00
Frame/Fdn, Beetek complete, waxed	7.00	Posca Queen marking pen	5.00
Frames - Ideal	1.50	Warning Sign	10.00
Frames - WSP	1.50	Bee Poster	20.00
Foundation - Plastic, full depth	2.10		
Foundation - Plastic, FD, pre-waxed	3.10	Club Polo Shirts S/S	40.00
Foundation - Plastic, WSP	2.00	Club Polo Shirts L/S	45.00
Foundation - Plastic, Ideal	2.00	Club hats with logo	15.00
Foundation - Wax, per sheet	2.40	T-Shirts "Beekeeping it Real"	20.00

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: Club Shop Stewards: Frana M or Alan Z via email:

shop@beesnorth.com.au

