

# Townsville and District Beekeepers Association (Inc.)

[www.beesnorth.com.au](http://www.beesnorth.com.au)



PO Box 1115, Aitkenvale QLD 4814

## Newsletter No. 9, Sept 2015

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## **Nano particles of tea tree oil can control AFB**

Some recent progress with the prevention of AFB sounds promising, and good old tea tree oil might be coming to the rescue again. The title of the recently published research paper just about says it all: "Antimicrobial activity of tea tree oil nanoparticles against American and European Foulbrood diseases agents".

*Paenibacillus larvae* and *Melissococcus plutonius* are primary bacterial pathogens of honeybees and the causative agents of American and European foulbrood disease (AFB and EFB) respectively. There are few preventative treatment options beyond the use of conventional antibiotics, and in Australia, AFB is a notifiable disease with total destruction of the hive, bees and frames being the usual outcome for us up here in Townsville - it's not a pretty picture if you get this disease. Antibiotics are restricted by use to vets, and often result in resistant strains of bacteria after prolonged use, AFB has already become resistant to one antibiotic in USA, Canada and Argentina, and their use prevents your honey from being a "natural" or "organic" product. to some customers.

Researchers have had some great success with tea tree oil against these bee diseases. Lab tests showed that tea tree oil was effective against the disease agents, but when the oil is made into "nano particles" or very small droplets coated in a special surface treatment, it is effective against the diseases in live bees. Nanostructured drugs (drugs that encased in the tiny particles) have some advantages over conventional medicines, such as slow, gradual and controlled release, increased bioavailability, and reduced side-effects, among others. Tea tree oil is a natural product and cheap compared to antibiotics. In the tests, bee mortality was evident only in the treatment with normal tea tree oil spray, but the nanoparticles showed no toxic effects after 7 days of observation. These results showed for the first time that tea tree oil "nanoencapsulation" presented a high activity against AFB and EFB in live bees, showing that the use of nanotechnology may represent one alternative way for the treatment or prevention of these devastating bee diseases.

If you do suspect AFB, then get on to it quickly. Free testing of brood and hive material is available from DAF if you are a registered apiarist (which you should be anyway). The "matchstick" test is pretty definitive, so ask someone in the Club if you haven't done this before. Apparently there are now trained sniffer dogs that can detect early signs, and some experienced Club members can sniff it out too - just ask for help if you are unsure - and Frana has some free kit tests that might be helpful for detection.

Reference: *Vianna Santos et al, 2014 (in press), Journal of Asia-Pacific Entomology, Volume 17,*

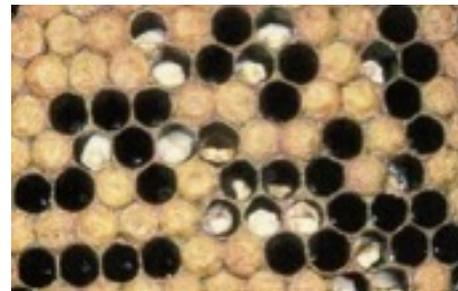


## **Chalkbrood update- a drag on hive production.**

In the August Newsletter No 8, I indicated that the DAF said there were no chemical cures for the fungal infection Chalkbrood, but there are a few beekeepers who claim otherwise. I have also found a thorough study by our own Rural Industries Research and Development Corporation (RIRDC) that tested natural compounds such as tea tree oil, etc etc on Chalkbrood. It's a long document, so I have précised it for you. Many natural products can be demonstrated as being effective at killing chalkbrood in the lab (in vitro), but few -if any- tests in the real world (in vivo) in a real hive have demonstrated effectiveness. Tea tree oil, banana skins, thymol, peppermint oil, formic acid, many essential oils like rose oil, ginger oil, etc fall in to this category. See the recipes from Joshua Mulders in next

issue. Sources: <https://www.daf.qld.gov.au/animal-industries/bees/diseases-and-pests/chalkbrood>

*The control of chalkbrood disease with natural products, RIRDC, Publication No. 03/107, Project No. DAQ-269A*



Chalkbrood in a section of capped brood



Thanks Setve K.

## **Something for Father's Day?**

A copy of a rare book by Rayment, Tarlton. "A cluster of bees: sixty essays on the life-histories of Australian bees". Sydney. The Endeavour Press, [1935]. Octavo, 752 pp.

A very good copy, scarce. and a steal at

only **\$1,850**

One of the classics of Australian entomological literature, handsomely published and the only true monograph on native bees. Percy Tarlton Rayment (1882-1964) was an Australian artist, author, broadcaster, poet naturalist, entomologist and beekeeper. He wrote many popular articles and other books on bees.

<http://www.andrewisles.com/>

## **"Always expect the unexpected" - Tales from a feral hive.**

Why are queens so complicated? I saw 4 emergency queen cells on the brood frames in the abandoned/swarmed hive - so I waited until they all hatched out, but no queen was "in the house" when I got back from Lord Howe Is holidays. Maybe Bee eaters got them? We have been having big problems with Rainbow Bee Eaters recently (they can eat around 200 bees/day each and a flock of more than 30 or so can decimate an entire hive). Our usual queen breeder (Graeme Armstrong) managed to get only 40 queens out of 400 of his new queen nucs due to predation by the Bee Eaters - thats a yummy 360 queens down the hatch!!!! Commercial apiarists out West are really getting hammered by the birds and the prolonged dry spell - no flowers for the girls.

So - anyway, I took eggs/uncapped brood from my home hive over to the abandoned/swarmed hive as soon as I saw the hatched queens had not returned - checked a week later - none were turned into queen cells - bummer. Got a phone call yesterday afternoon from Club member Geoff Fischer who had managed to get 2 marked Italians for me - yahoo, but I hope the new queen sticks, as this hive has been queenless now for over 8 weeks. The second new queen replaced a swarm hive queen, now 18 months old, that is starting to get angry, and this location has produced some of the angriest bees I have ever worked with. Frana and Jon McKinstry have a video of a previous queen being killed by this hive, and I have lost 3 replacement queens at that location previously. Can a location make bees angry? What flower could make the girls so upset?? I have had Italians, Caucasians and swarm hives there- all go feral on me?? Still learning about the intricacies of the hive.

Anyway - always expect the unexpected when you open a hive!!

**Late news update:** both Italians sourced from Geoff Fischer took to their new homes straight away, and I now have 2 frames of eggs, larvae and uncapped brood - all of a sudden, things are looking up for a good year.

Lindsay T

## Remote and Extreme Beekeeping

Two stories from your roving Bee-hound Newsletter Editor, one must take the cake for the most remote and beautiful location, and the other is the most extreme beekeeping procedure I have encountered.

Jack Shick - Lord Howe Island beekeeper, fisherman, mountaineer, photographer and guide. Jack is a 5th generation Lord Howe Is born resident who has guided around 1800 climbs to Mt Gower (884m), takes tour groups ocean fishing, photographs the natural beauty around his island home - and of course keeps bees in a spectacular remote location 600 km off the NSW coast.



*Mt Lidgbird, and Mt Gower with supply ship at Lord Howe Is - Jack's playground.*



*Jack's hive in the Kentia palm forest.*

European bees were brought to Lord Howe Is in the 1940's to service the vegetable seedling farm established there by Yates Seeds.

When the industry closed down, the bees were left to go feral. Fortunately there appears to have been no problems arising from the introduced European bees, but the young Jack and his school-mates decided to catch a few feral hives during their teenage years. Bee equipment was hard to get on the island, so Jack described a posse of wetsuit clad lads, with terry towel hats, thongs and mossie screen veils attempting to extract some hives from tree logs. If you have ever experienced the reaction of bees to black rubber gloves while inspecting a hive, you will understand the reaction that the disturbed hives gave Jack and his mates.

These days, Jack gets his Ligurian queens from Kangaroo Is (SA) or Italians from Perth (WA) in order to avoid the diseases prevalent in NSW. The NSW Department of Agriculture sent over 6 nuc's to start the

industry in earlier days and that has helped boost the bee population. The island does not suffer from SHB, AHB, Bee Eaters, or cane toads, but has experienced Nosema occasionally. A good year might produce up to 50 - 70 kg honey/hive, but is very weather dependent with no honey produced one year. Many of the flowering plants on Lord Howe Is are endemic and the honey flavour would be unique - unfortunately there was none available for me in mid winter this year, although the locals do get to buy some of Jack's unique honey. The endemic Kentia palm groves are a mainstay industry of the islands, providing the seedlings for the world's most popular parlour palm during the 19<sup>th</sup> and 20<sup>th</sup> Centuries. The bees greatly assist the self pollinating Kentia palms, with male and female flowers appearing alternately on the palms.



*Jack Shick and one of his hives.*

Jack says he has 3 hives now going really well, with about 6 frames of brood and plenty of supplies, so it could be an early honey flow given this warm weather.

## ***Kiwis shift their hives by chopper - no drone jokes please!***

Take a look at this Youtube clip: <https://m.youtube.com/watch?v=jE9yuSvimw0>

Your Roving Bee-hound Editor met Ben Hall - a Kiwi chopper pilot - for a coffee and a chat about the Manuka honey industry in NZ, and this is how they transport their hives. It makes a mockery of my adventures in the backyard when moving the hives only 10m by wheelbarrow. More about the "Chopper Bees" next month. How much money is that Manuka honey worth to have \$2,500/hour choppers buzzing them around??  
"Cheers Bro"

Lindsay T.

## Record profit from almond grower Select Harvests

If you were paying attention to the last Newsletter, you would have seen that this company had started planting alternate crops such as canola beside their almond groves in order to improve the nutrition of the bees carrying out the pollination of the almond flowers. Now look at their impressive results due in part to their hard working bees.

“A record profit figure by Select Harvests Limited (ASX:SHV) was driven by a massive almond crop yield that follows strong demand for the nuts. The almond and health food company posted a net profit of \$56.8 million with the figure lower due to a change in accounting for the value of almond trees. The company’s underlying earnings before interest and tax of \$89.6 million represent an increase of 186 per cent on 2014 figures. A record almond crop yield combined with the average price of almonds rising from \$8.50/kg to \$11.45/kg drove the stellar result. The company will pay a final dividend of \$0.35 per share.”



<http://www.abc.net.au/news/2014-08-25/nrn-shv-results/5693794>

### CHARTERS TOWERS

## Bee hive thief stung with fine

A CHARTERS Towers man who stole some bee hives so his kids could have some extra honey soon learnt the error of his ways – “the bees gave me a pizzling”, he told Bowen Magistrates Court this week.

Denny Lee Webster pleaded guilty to stealing two hives and the wilful damage of eight more after he had seen the hives beside the highway between Charters Towers and Mingela.

Prosecutor Elizabeth Smith said G&A Apiaries had reported the theft and damage to police on May 21.

She said the company had hives spread out between Ravenswood and Mingela, and the two stolen hives were found at a truck stop near Mingela.

Webster had told police he’d taken the hives from beside the highway so his kids could have some extra honey but he had not had any luck

getting at the golden nectar.

He described his actions as stupid and out of character and that the bees had given him a “pizzling” when he tried to get at the honey.

Webster also ran his car into another eight hives, damaging them and his car.

Mrs Smith said Webster had already paid \$1500 restitution for damaging the hives, and he was fined a further \$800.

VI - BULED1Z01MA

Article submitted by Ron Rapson

## **AGM Minutes**

### **TDBA inc meeting 16-08-15.**

Held at the Mundingburra Scout Den in Aitkenvale., 2:00pm.

President Ron welcomed members and guests and the newer members.

Ron spoke about the honey flow that isn't happening and it is generally poor. Bee-eaters a big problem for all members. A few suggestions offered from the floor as to how to control them and scare them. Graham Armstrong has had considerable trouble with his queen breeding because of the birds.

Tito asked members about a pollen collector he had and asked if people knew how to use it. He had some offer advice.

### **2:10pm The Townsville and District Beekeepers Association Inc**

#### **AGM opened.**

**Present:** see the sign in book.

**Apologies:** N Elliman; Leonie and Lennie; Geoff Fisher; Ray B. and others from the emails.

**Minutes of Previous AGM;** taken as read. Moved. Grant W. Sec. Sonya V.

**Matters arising;** a need to not forget the motion about yearly fees.

President's report given orally by Ron. The club has been pleased with the increase with the membership and in the general interest in bees. He thanked everyone who helped out through the year with our functions whether organizing them or being at them to support the organizers. He commented on the change of executive this year.

**Treasurers report.** Delivered by Frana. She gave a run down of all the accounts and how she has dealt with the huge increase in turnover membership and stock and the amount of work it is taking. Our club is very healthy and has been for a while. A full report is available for those who are keen to study it. A detailed report needs to sent to The Office of Fair Trading in the near future. Some discussion on this, and Frana to sort.

Dave T. asked if the financial report be available 14 days before the AGM. It was mentioned that this hasn't been done before and it could be done although the time frame is far too tight for it to be reasonable for the volunteers that run the club. The incoming committee to look into the issue and perhaps the AGM could be shifted to suit a move such as this.

The Treasurer's report Mov. Dave T. Sec. Jon McK. Carried.

Questions were asked about the auditing and ideas were bandied about.

Frana fielded questions from the floor.

#### **The Executive was stood down before the elections.**

\_\_\_\_\_ assumed the chair.

Call for nominations for **President**. Nominated Ron Rapson

Moved Dave T. seconded Lindsay T. Accepted and carried.

Call for nominations for **Vice-President**. Nominated Paul P.

Moved; Frana McK. Sec. Steve K. accepted and carried.

Call for nominations for **Secretary**. Nominated Carla K.

Moved: Jon McK. Sec. the Meeting. . accepted and carried.

Call for nominations for **Treasurer**: Nominated Frana McK.

Moved Ally M. Sec Dave B. accepted and carried.

Call for nominations for **Bulletin Editor**. Nominated Lindsay T.

Moved: Jon McK. Sec. Dave B. accepted and carried.

Call for nominations **Gear steward**; nominated Frana McK.  
Moved; Frana McK. Sec. Jacinta P. accepted and carried.

The floor was asked for **Committee members**;

Nominated Dave Bowtell moved Dave T. sec. Jon McK.  
Nominated Dave T. Moved Frana McK Sec. Jacinta P.  
All accepted and carried.

**The motion** was put forward: That the Townsville and District Beekeepers Association Inc. annual fees be at \$25.00 for the 2015-2016 year meaning from September to September 2016.

Moved Dave T. Sec. Kirsty S.

Discussion ensued and questions were fielded from the floor. After some robust discussion which included other subjects, the motion was carried.

From this discussion another was continued regarding insurance for the club. Many opinions were given and discussed with many members speaking. Eventually Mike Taylor is to follow the issue up and report back when he is done.

Lindsay is to make the idea known in the newsletter to seek other expertize and interest.

Discussion was had on the possibility of the club purchasing an extractor and a hot knife to be used for and by members. The meeting agreed not to get one mainly because of the treat of disease spread and the lack of where, when and how it is to be stored.

**Meeting closed 3.05.pm.**

Drinks and nibbles were enjoyed

Dan Donovan spoke to interested parties about how to remove bees from building and other hard to reach places swarm bees get themselves into.

Dan had the materials he used for the procedure with him and spoke on how he uses them. The shop was doing a rip roaring trade as well.

## TDBA Office holders for 2015/2016

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<u>President:</u>	Carla Kersnovske	<a href="mailto:cke00786@bigpond.net.au">cke00786@bigpond.net.au</a>
<u>Vice President:</u>	Paul Payne	<a href="mailto:trapper4812@gmail.com">trapper4812@gmail.com</a>
<u>Secretary:</u>	Ron Rapson	<a href="mailto:ronald.i.rapson@team.telstra.com">ronald.i.rapson@team.telstra.com</a>
<u>Treasurer:</u>	Frana McKinstry	<a href="mailto:franajon@gmail.com">franajon@gmail.com</a>
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<u>Librarian:</u>	Jon McKinstry	<a href="mailto:franajon@gmail.com">franajon@gmail.com</a>
<u>Equipment Steward:</u>	Frana McKinstry	<a href="mailto:franajon@gmail.com">franajon@gmail.com</a>
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	Dave Turnbull	<a href="mailto:turnbuld@bigpond.net.au">turnbuld@bigpond.net.au</a>

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## **August Meeting Minutes**

**TDBA inc. August meeting 16-08-15.**

**Held at the Mundingburra Scout Den in Aitkenvale., 3.20pm.**

**Present:** see the sign in book.

**Apologies:** N Elliman; Leonie and Lennie; Geoff Fisher; Ray B. and others from the emails.

**Minutes of Previous meeting;** taken as read. Moved. Ron. Sec. Kirsty.

**Matters arising;** Frana was an Apology for the last meeting.

**Treasurer's Report.**

The club is very healthy with over \$6400. With some payments to come out of it.

Correspondence.: nil

### **General Business:**

New Secretary is Carla Kersnovske, email: [cke00786@bigpond.net.au](mailto:cke00786@bigpond.net.au). Thank you Carla and Grant

The club shop is going very, very well and Frana will be ordering more stock. Frana spoke at length on that.

Club purchasing more hive tools form China which are very good.

AFB kits are available to members who suspect they may have the disease, Rob Steven's mentioned that the test is free and he could help out members who may be suspect, he will send them away if need be.

Jon and Frana hosted the Townsville Homeschool Group speaking to the group about bees.

Iris Z. spoke at the Honey Aitkinson photographic display.

Other dates to be spoken at include University of the Third Age by Frana and Jon on the 19<sup>th</sup> September.

The high visibility of beekeeping is keeping the club numbers growing.

The High visibility banner is still work in progress.

Rob Stevens offered to hold more AFB and SHB workshops for members and guests here in Townsville. He asked for more volunteers for the Varroa alcohol swab test. The sentinel hives also need to be monitored and he asks for a hand with them particularly at the Ross Island site.

WE as a club need to be very aware and educate the public we know about the need to be vigilant to bee diseases here in the north.

Members need to have on their boxes, Hive Identity Numbers or HIN. On all of their hives frames bottom boards and lids.

The Asian honey bee, *Apis cerena*, is on the back burner with not a lot of information forthcoming. More confirmation about the dangers of having the bee in and around the area.

### **Next meetings:**

September; Honey Aitkinson's place 94 Abbot St. Oonoonba

October; Lenny n Leonie's place Bus Road Charters Towers

November: (tentatively) Mundingburra Scout Den

December:

the first Sunday of December is usually our Christmas Function for interested members. Grant to book the West End Hotel for a 12pm luncheon, numbers to be asked for at the November meeting.

An extra meeting could be scheduled for the last week in September/ first week in October at the Wildlife Carers Building in Casey Street, Aitkenvale for an information night aimed at the newer members. The format is yet to be decided but AFB; SHB; care and consideration for bees and a question and answer session will be on the cards.

Dan Donovan held a Q+A with several pieces of low cost gear he uses to extract swarms from walls and logs. Much of the equipment was common PVC plumbing and timber, but Dan showed some ingenious two way entrances to extract the bees and hives. Thanks Dan.

**Meeting closed. 4.10pm.**

# Club Shop Items Price List

These prices are only available to currently financial members

<u>Item</u>	<u>Price</u>	<u>Comment</u>
Veil with drawstring	20.00	
Jacket / Round hat	50.00	
Ventilated jacket	70.00	
Gloves	20.00	
Booklet - Managing AFB	6.00	
Hive tool (S/S)	12.00	
Hive tool (Yellow)	5.00	
Smoker	35.00	
Queen Excluder - Wire	20.00	Limited supply
Queen Excluder - Plastic	5.00	Ideal for use as inner lids
Frames - Full depth	1.35	
Foundation - Plastic	1.90	
Foundation - Wax	1.60	
Bee Brush - Natural bristle	8.00	
Bee Brush - Synthetic bristle	7.00	
Club Polo Shirts	22.00	
Queen Catcher	3.00	
Frame Gripper	8.00	
Gate valve	10.00	
Capping knife, serrated	15.00	
Comb scratcher	8.00	
Honey jars 500gm	0.75	
1kg Buckets	1.25ea	
<b><u>TRAPS</u></b>		
Apithor trap	6.00	
Silver Bullet trap	7.00	or 3 for \$20
TK Beetle mat	6.00	
"Die Ya Bastard" trap	2.00	
Diatomaceous earth	2.00	
Full depth super	25.00	Unassembled
Lid	25.00	Unassembled
Base	20.00	Unassembled

## ***New item in the Club Shop***

We now have feeders in stock, useful for feeding sugar syrup directly to bees inside hive. Use 1:1 white sugar dissolved in room temp water. \$1.50 ea.

## ***From the Treasurer***

At the recent AGM there was some discussion around whether our books needed to be audited by an accountant. On checking with the Office of Fair Trading, our increase in revenue for the 2014-2015 period has moved us into 'Level Two'. As such, we do need our books audited, rather than just a 'verification' by President and Treasurer as was the case in the past. The audited Treasurer's Report will be submitted to the Office of Fair Trading as soon as available.



## ***Christmas function on Sunday 6th Dec. 12pm.***

Please give confirmed numbers by the end of November to Grant.

## ***Quote seen on a palm tree nursery website - can anyone verify this ?***

<https://www.palmsonline.com.au/flex/playing-horticultural-cupid-the-ins-and-outs-of-pollination/32/1>



From the Mullumbimby Palms Nursery in NSW:

"Feral honeybees (*Apis mellifera*) in Australia are threatening native bees, which has a direct and severe impact on plant pollination."

Does anyone have evidence for this statement, or know of anecdotal reports regarding competition between European and native bees??

Please let me know if you have any reliable or anecdotal info at:- [trottlindsay@gmail.com](mailto:trottlindsay@gmail.com)

# **Club Membership Fees for 2016 are due: now \$25/year (still the cheapest in town)**

Pay by direct debit (put your name OR hive Registration number in the reference field)

Bank details: Townsville and District Beekeepers Association Inc,

Bendigo BankBSB: 633 000 Account: 141 466 078

Get access to discount equipment, free advice, access to bee mentors, news about nucs, swarms, hives for scale, raw honey and wax availability, a Native Bee special interest group, and a monthly meeting with tea, coffee, eats and live hive openings - what a bargain.

**Please welcome our new members and give them a hand with their questions and interest in all things Bee!**

Roy B, AITKENVALE  
Davey M, HYDE PARK  
Colleen & Dave F, HERMIT PARK

Ingga G, AITKENVALE  
Wayne B, HERMIT PARK  
Robyn & Steve L, PROSERPINE

***TDBA Starter Kit -  
The Perfect Gift for a budding Beekeeper  
All available in Townsville:  
Club Members Price Only!***

Bee Jackets \$50      Hive tools \$5  
Bee Brush \$7      Gloves \$20  
Smokers \$35  
All five items sold as a Beginners Kit \$90

Uncapping knives sold separately \$10-\$15,  
Gate Valve \$10

***Frana: Ph. 0401 014 948***



Townsville & District

**BEEKEEPERS**

ASSOCIATION

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