

# Townsville and District Beekeepers Association (Inc.)

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



PO Box 1115, Aitkenvale QLD 4814

## Newsletter No. 8, August 2015

### In this Issue:

- AGM at Mundingburra Scout Hall
- Chalkbrood and how to deal with it
- Native bees, Blowies and Mangoes
- Almond groves and bee nutrition
- Meeting minutes from 19/08/2015
- Queens on the move
- TDBA Shop items
- 2015 Membership fees due now



**Next Meeting is the AGM:  
Mundingburra Scout Den  
10 McIntyre Court, Mundingburra.  
2:00 pm, 16 August, 2015  
Bring a chair and a plate of food??**

### ***Queens hold the key to the hive***

Newbees need to gain experience in assessing the state of their hives fairly quickly as the honey flow is about to start. In order to keep the hive humming, or buzzing, one of the most important aspects in beekeeping is recognising the status of the queen. Here are some brief explanations to some of the terms that refer to the status of the hive and queen:

- **Queen right hive:** this term describes the ideal situation in a hive where the queen is laying well and the hive is performing all brood tasks normally. Signs of this are a brood frame which has a large patch of recently laid eggs or hatched eggs across a large section of the frame, and there is a wide section of frame with white larvae of similar size, also a full comb of capped worker brood with no holes or dips in the caps is a good sign.
- **Laying worker, or drone layer:** this describes a situation that is often difficult to solve. If only drone brood is seen in the brood chamber, or any drone brood are seen in the honey super, then there is a problem. This tells you either the queen has absconded or swarmed, or she is infertile. The queen exudes a pheromone that helps inhibit egg laying by workers who cannot mate and therefore cannot lay fertilised eggs but only unfertilised eggs that produce drones. If the queen is absent then the inhibition of workers to lay is removed. Newly introduced queens may be killed on several attempts to re-queen this type of hive.
- **Swarmed hive, or queenless hive:** in either case the queen has gone and may have taken half the workers and most of their/your hard earned honey with them. You will notice this when you open the hive and notice that there are not many bees in the hive and there is no newly laid eggs or larvae and there is only older capped brood or none at all. If the hive did not create a new queen from the fertilised brood, there is no solution other than buying in a new queen if you can get one
- **Failing queen:** this can be seen when the queen is getting old and failing and both worker and drones are mixed together in the brood laying pattern. It indicates the queen is running out of sperm to fertilise the eggs
- **Supersedure** occurs when the hive has not had enough warning that the queen has swarmed or died and the hive is forced to make a queen from within the normal worker cells containing eggs or larvae. The long extended supercedure cell in the middle of the brood frame (looks like a thin cigar) contains a larvae that has been fed royal jelly for longer than a worker or drone, and capped in a larger cell to allow for the extra royal jelly and bigger bee to develop.

Source: ABK December 2012, Jan 2013



***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***



***TDBA is proudly supported by:***

***THE AUSTRALIAN BEE-KEEPER MAGAZINE (ABK)***

Published monthly Subscriptions \$72 per year. Available from: Pender Beegoods,

PMB 19, MAITLAND NSW 2320

***LOTS-A-STINGS***

Honey, wax, boxes, frames, plastic foundation and much more.  
Pollination services. Will help new members get started with bees.

**Dan Donovan: Ph 0428 218 816**



## Chalkbrood - a drag on hive production.

**Chalkbrood** is a fungal infection caused by the fungus *Ascosphaera apis* and it affects both sealed and unsealed brood.

At first, larvae are covered with a fluffy white fungal (mycelial) growth that looks like white mould on bread or very fine cotton wool. Larvae become swollen inside the cell. Later, the dead larvae dry out to become hard, white or grey/black chalk-like mummies. See photo opposite on right.

Chalkbrood may be in unsealed or, in sealed cells it causes light or dark sunken cell caps, many with perforations (pin holes). In a heavy infection, brood pattern is scattered.

**Confusing symptoms** Chalkbrood symptoms may be mistaken for other brood diseases, such as American foulbrood (AFB), sacbrood, European sacbrood (EFB) or even white pollen. However, once identified there is no mistaking the appearance and consistency of larvae affected by chalkbrood.

**Housekeeping** Bees may detect dead larvae under cell caps, chew holes in cappings and remove mummies. A hive with good hygiene habits usually removes mummies within 10 days. Mummies are dropped to the hive floor and later, outside the entrance. See photo opposite on right.

**Transmission** Spores are highly infectious and are carried in contaminated pollen by infected foraging bees with spores left at floral and water sites, by queens, drifting bees, and drones. Shifting bees on trucks with an open entrance causes drift and hence spreads disease. Spores remain viable for up to 15 years or more in equipment and soil. Use of contaminated sites and old equipment could lead to infections. Interchange of equipment by the beekeepers also spreads the disease.

**Stress** A change in brood-nest temperature can trigger chalkbrood disease. When nurse bee numbers become insufficient to cope with weather extremes (cold clustering and heat fanning), the brood may be left unattended. Usually the first larvae affected are those around the edges of the brood where the brood temperature may be higher or lower. Stress of any kind can cause the signs of the disease to become apparent. Common causes of stress are:

- high and low temperatures
- wet or dry conditions
- poor nutrition
- failing queen
- poor hive management
- moving hives.

The Biosecurity Sciences Laboratory in Brisbane provides a brood-disease identification service.

**Control** There is no effective chemical agent effective for use against chalkbrood and with no registered chemicals available for control, it means the only way of controlling the disease is through management practices and use of disease-resistant bees.

**Management practices** that reduce the stress on hives also reduce the number of chalkbrood spores. Maintaining strong healthy colonies has been demonstrated to reduce the effects of chalkbrood.

Management practices which may reduce the effects of chalkbrood disease are:

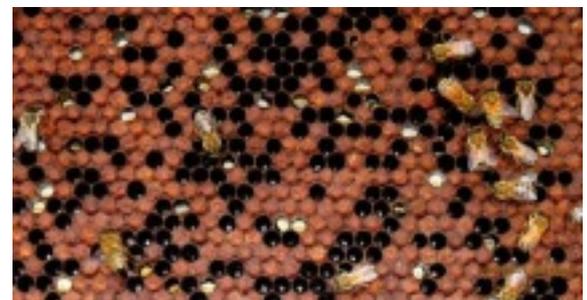
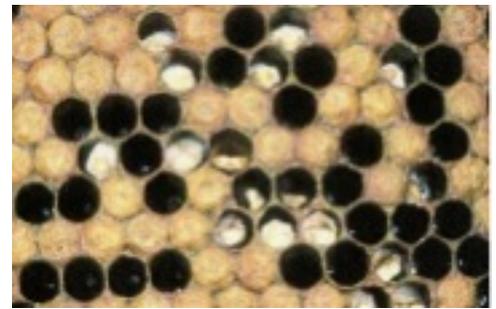
- removing 'mummies' from bottom boards and around the entrance
- destroying combs containing large numbers of 'mummies'
- supplying new combs
- providing good ventilation in hives
- adding young adult bees to hives
- not allowing bees to winter in a hive that is over supered
- feeding sugar syrup, fresh uncontaminated pollen or supplements
- maintaining strong hives by regular re-queening
- reducing or preventing interchange of hive materials
- not using the same site each year - shift the apiary site slightly.

Good hygiene will also help. Change clothes and disinfect smokers, boots and hive tools using chlorine bleach between apiaries or infected hives.

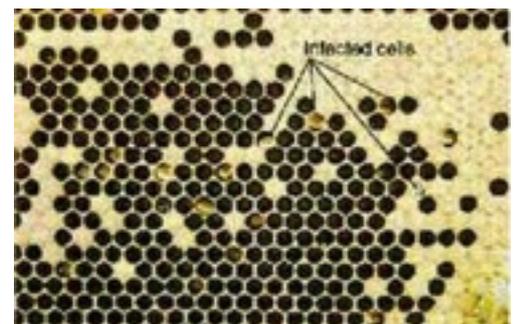
<https://www.daf.qld.gov.au/animal-industries/bees/diseases-and-pests/chalkbrood>

<http://beeinformed.org/>

<https://www.google.com.au/webhp?sourceid=chrome-instant&ion=1&espv=2&ie=UTF-8#q=chalkbrood%20photos>



Chalkbrood in a section of capped brood



## ***Native flies, not bees, are the top pollinators of mango trees***

<http://www.abc.net.au/news/2015-06-12/new-study-shows-flies-not-bees-are-mango-farmers-best-friend/6540674>

Surveying of ten mango farms at Mareeba, in Far North Queensland, has revealed up to 50 different insects came into contact with the reproductive parts of the flowers, including two bee species, nine flies and one beetle.

Not only were flies shown to be the most dominant and frequent visitors of the mango flowers, they also proved to be highly effective at carrying pollen when compared with honey bees.

The native bee transferred on average seven pollen grains a visit, the blue blowfly about 6.8 pollen grains and the honey bee 2.7 pollen grains. And while the results might surprise many, Dr Rader said the survey confirmed the pollinating power of flies was already being harnessed by some growers. Some of the farmers were bringing in road kill from the roads outside their farms because they knew the flies had a larval stage that depended on these dead animals, so the farmers were already onto it.

"And most of the flies moved frequently between flowers and they're good at moving between trees down the road, so in terms of trying to cross-pollinate, they seem to be the ones that would be doing a good job." said Dr Romina Rader, whose study has revealed flies are the top mango pollinators.

Native bee, *Tetragonula carbonaria*, has been pipped by species of flies as the dominant pollinator of mango



## ***Just like humans, bees need a variety of food to stay healthy***

<http://www.abc.net.au/news/2015-06-15/almond-orchard-trialling-canola-for-bee-food/6546364>

Most beekeepers understand the the need for bees to have access to a variety of pollen sources to ensure adequate proteins and micronutrients are available to ensure a healthy brood and hive. Large expanses of monoculture crops like almonds, and broad acre grain crops combined with a lack of "weeds" along fence lines has been blamed on being a contributing factor to CCD in overseas hives. This was graphically shown in the bee documentary "More Than Honey" that TDBA hosted last year with sponsorship from Hutchinsons Builders.

Bees in the South Australian Riverland will soon have an additional food source while they go about their business. busily pollinating almond trees. Select Harvest in the Riverland (SA) is planting canola to supplement the bees' diet while almond pollination is taking place. In previous years, a lack of pollen around almond orchards meant bees lost weight and productivity during almond pollination. This is the first year that Select Harvest is going to plant some canola to supplement the bees. According to the farm, there are overseas examples that indicate by providing some alternative forage sources to bees it will improve their health, rather than just feeding on the one nectar source, so the alternative crop will be providing some diversity in the orchard. Apparently the Californian almond orchards have been doing this for two seasons already, so they've been looking at some seeding annuals and diversity mix of plant species as well.

The South Australian company said they were "always looking to maximise pollination outcomes and bee health, because it's in our own best interests as it is the bees."

Typical view of monoculture crops with no other plant variety for bees and barren ground surrounds.



Almonds do not self pollinate, so they require external pollinators such as bees



## Second Native Bee Workshop hosted by TDBA in June 2015

Thanks to Alan Ziegenfusz for the photos.

Dr Tim Heard describing the hive contents and how to split a hive



A split log hive revealing the brood and honey pots of *T. hockingsi*



*T. carbonaria* in a hive box designed to be split and to enable native honey harvests



This page intentionally blank but unable to delete it.

## **TDBA 19 August 2015. Meeting**

Held at the Rifle Club out at Mona Park via Clare (upper Burdekin)

Members and guests were shown Virginia's hives kept at the rifle club, with the newer members impressed with what they saw. Pretty quiet bees who were working well.

Grant and other members and guests organised and cooked the BBQ lunch. Over twice as many turned up as informed Grant as to who was coming. Please let the organisers know in future - it's essential for catering.

**Present** as per book. a big meeting. over 41 members and Guests

**Apologies:** Neal E. Lindsay and Heidi, Lennie Mc., Leonie D., Doug, Sonya Mc., and others on the email.

**Minutes of Previous meeting:** taken as read.

Move Paul P.. sec Ziggy.

**Matters arising:**

ABK ordered for the club.

**Correspondence.:**

**IN:** Emails from the website re interested people, Bendigo Bank Statement, Invitation to Honey Aitkinson's exhibition in Townsville.

**Treasurer's Report:** Held over, but we are healthy.

### **General Business:**

Lots of discussion question and answer type about opening hives at this time of the year. A few different points of view put forward.

Jon Mc. asked for our members to think of some sort of Protocol regarding an outbreak of Varroa mite if it was to occur. Everyone from the club would be in the know then and maybe lessen the impact of the invasion. Graham Armstrong spoke of his knowledge and experience of the Varroa.

Another website to be aware of .. [www.beesource.com](http://www.beesource.com) worth a look and a study for knowledge, also www.Ted website. bee life cycle a couple of good films in it.

Members discussed the issue of AFB and it was decided that the club is to have on hand AFB detection kits for members to purchase when they suspect AFB in their hives. Graham Armstrong had donated some more queen bees to the club and the proceeds of those sales will be used to purchase the AFB kits.

Graham is a queen breeder in Brandon/Ayr and we heavily encourage our club members to use him as a source of queens when you need them this coming season.

Grant brought up an issue about using lids without airflow holes in them. Something for the members to consider. An article in the ABK was of great interest to him. It made sense the argument for using lids without airflow holes. Some members use the forum "[beemaster.com](http://beemaster.com)" and "[biobees.com](http://biobees.com)". Also the Australian bee Forum.

Remember our club heavily recommends our members become registered beekeepers with the QLD Govt departments. It only costs (this year) \$14.80/year and is usually due in March.

It is the swarming season now, Next meeting the swarm list will have to be updated.. Only registered beekeepers should be on the swarm list. Discussion was held with regard to a sharing of knowledge about how to collect swarms from the various places they appear.

Be sure to leave enough honey/food in the hive for the bees and be ready for the Spring when the honey flow begins. The drought will put a dent in the quantity collected but be aware and look at your hives regularly in the coming 4 months.

Next Meeting AGM. All positions will be declared Vacant. Grant is standing down as Secretary so a new secretary will be elected.

### **NEXT MEETINGS:**

August: Mundingburra Scout Den Mundingburra. (and AGM)

September: Honey Aitkinson's place

October: Leonie and Lennie's place in Charters Towers

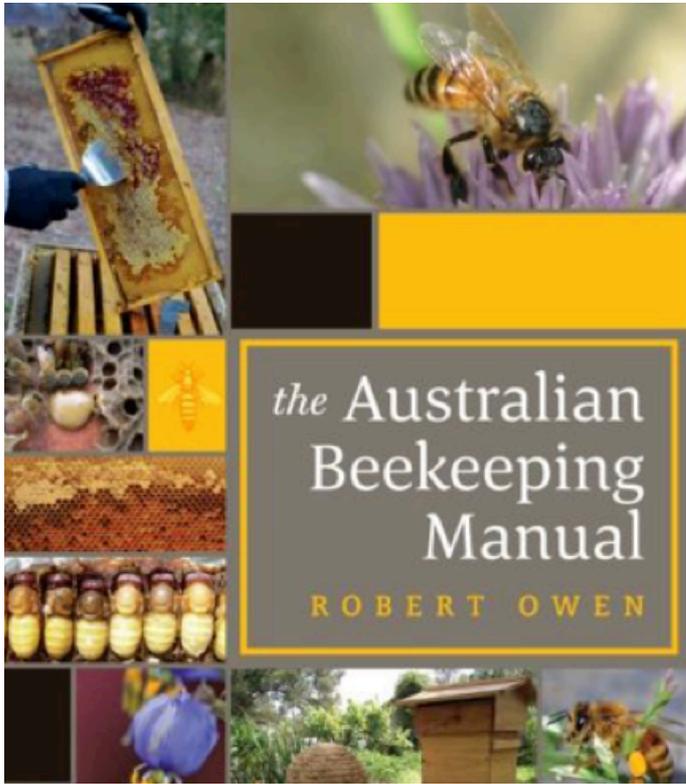
November:??

December: a function of some sort?

February: Tito's place on Maggie Island at West Point. (last time you could make a weekend of it and stay over)

Please check our membership list and be sure your details listed are correct including your Qld rego brand. If not please let Newsletter Ed. know so they can be corrected. Email: [trottlindsay@gmail.com](mailto:trottlindsay@gmail.com)

Meeting closed 12:30. BBQ food and drink and dessert were enjoyed before hand.



## ***Don't forget to order your copy of the latest bee book with Frana!***

New Aussie beekeeping manual – out soon

The book is aimed at both the novice and experienced beekeeper in Australia and explains in detail the steps required to manage colonies of bees. Supported by over 350 photographs and drawings, each action to be performed is explained in detail with photographs showing the steps as well as the final result. Many potential beekeepers are unclear about the equipment they need to buy and how to obtain their first colony of bees. The first chapters in the book explain in detail the equipment needed as well as equipment that may be useful later on as their confidence and experience grows. The chapter 'Your First Bees' explains how to obtain bees, where to locate them in the garden, and the basics of colony management. In addition to chapters on keeping bees, there are detailed chapters on the life cycle of the honey bee, extracting honey, the bee-friendly garden, entering honey in competitions, native bees and rearing queens. The result is a comprehensive manual that includes material not available in other Australian, North American or European books.

### **AUTHOR:**

**Robert Owen** is the director of Bob's Beekeeping Supplies, which offers beekeeping equipment and education. This book is the culmination of his own years of expertise and experience and also draws on the individual tales he has heard of the challenges and successes of managing honey bees in various environments.

RRP is around \$50 but the Club can get a discount if we order in bulk. Interested??

Place an order with Frana: [franaion@gmail.com](mailto:franaion@gmail.com)

## **Club Membership Fees for 2016 are due now \$20/year (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 sale, 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!**

Dave & Beryl S. from BUSHLAND BEACH,  
Rebecca P. from MOUNT LOUISA,  
Steve M. from KELSO,  
Sam N. from RAILWAY ESTATE,

Lindsay & Coralee G. from NORTH WARD,  
Jason D. from CAPE CLEVELAND,  
Mark P. from SOUTH TOWNSVILLE,  
Martin D. from ALICE RIVER.

# 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