

March 2014

Volume 2014,
Issue 3



PO Box 1115, Aitkenvale, Q4814

Special points of interest:

- **Storing Stickies**
- **Meeting Minutes**
- **The Pentland visit**
- **Zombie Bees**
- **Oils ain't Oils**
- **Book Review**

Next meeting:

Sunday 2:00PM
15 Mar 2014.

At Kirsty's Place 183
Ireland St,
Oonoona.

REMEMBER—your
chair

Newsletter of the Townsville and District Beekeepers Association



Photo: Z. Huang (www.beetography.com)

Bees North

www.beesnorth.org

Storing 'Stickies'!

This is a sticky problem for many! 'Stickies' are the frames you are left with after you have extracted (i.e. decapped and spun out) the honey. 'Stickies' are actually quite a valued commodity in beekeeping circles! This is because giving 'stickies' back to the bees instead of clean or "bare" foundation frames is far more efficient. It all makes sense if you look at it from a bees' perspective: that is - it takes somewhere between five and ten kilos of honey to make one kilo of wax! It therefore follows that for every sticky you can give them instead of a clean foundation, you are going to save your already overworked bees a "ship-load" of work and ultimately, you will be the winner!

So what is wrong with simply storing your stickies in a simple plastic container? This is well trodden path among bee keepers! Many have embarked on this course only to discover that within a week or two, their frames are infested with our beekeeping nemesis, the "wax moth"! At their worst, and within a few weeks, wax moth larvae will form 'grubs' that will eat their way through all your honey comb and leave behind a silk train of their whereabouts. Even a tight sealing lid on an esky or plastic container will not stop the wax moth larvae from getting established. The adult moths are very good at laying their eggs close to the entrance of prospective food for their grubs, even if it is at the cracks and entrances of eskies. The eggs hatch and the minute wrigglers make their way inside to feast on your bonanza!

So how do you 'keep' your stickies from getting spoilt by these blighters? Simply put, your options are:

1. Give the stickies back to the bees within a week or two;
2. Store the stickies in a fridge or freezer; Air-seal them!



An appropriate heat-sealer and some plastic bags is all that is required to store 'stickies' for an indefinite period. My heat-sealer is open ended on both sides, allowing for a wide bag to be passed through and sealed in several sections.

If you are in a position where option 1 and 2 won't work for you, why not try option 3? Ideally, this would involve vacuum sealing the frames in plastic bags. Unfortunately there are no vacuum-sealing bags on the market wide enough to take a full-depth frame. The widest bag on the market at the moment is 28cm wide and that would be fine, except that this is the external diameter.

Continued—pg 2

Storing 'Stickies'! Continued.....

The internal, usable, diameter is 25.5cm which is just a centimetre or two short of making this a success! I have also tried making my own bags and bombed out several times!

However, what I have been successful with is air-sealing them in heavy-duty plastic bags. This procedure has to be done within the first few days of honey extraction or else you will find the wax moth has preceded you! I bought a plastic bag sealer 400mm wide off eBay for just over \$100. The nice thing about this one was that it is open-ended on both sides so that a wide bag can simply be sealed in several sections. Alternatively, a 'hinged-style' 300 or 400mm heat sealer could do the same job by turning the bag over between sections.



8 – 10 full-depth frames can be sealed in a bag 900x610mm in size.

I have sealed up to eight stickies in a thick plastic bag, in a 2 x wide x 4 deep arrangement, but there was plenty more space to add an extra sticky or two, so I probably could have fitted in 10 stickies. Then I simply stand them end-on in a plastic container (minus lid) and let them sit until I need them, even months later. 20 stickies (or two super box-fulls) can easily store this way in a full-sized Nally bin. I have found that double-sealing both ends of the bag helps reduce wax-moth and leakage of honey. The nice thing is that if you only need a few stickies, you can slit open the bag just below the seal, take out what you need and reseal again (double –seal!) and store them until you need them next time!

Ray Berkelmans...

Minutes of the Last Meeting

2014 Townsville and District Beekeepers Association, February meeting 16-02-2014.

Held at Grant's place in Cranbrook.

No hives were opened due to the weather being average and the last meeting was 2 months ago.

President Ron welcomed the members and guests and thanked those who travelled. Ron had the new members introduce themselves as their are quite a few.

Present: as per signed book, over 35 members and guests

Apologies: as per the book and the Charters Towers contingent, Connie and Ally,

Minutes of Previous meeting read by Grant:

Moved Frana Sec: Jon Mc..

Carried.

Matters arising: New member Geoff displayed a bottom board with a inbuilt trap to catch SH beetle. \$50 plus \$5 postage, very impressive as well.

Ray and Frana have organised the beginners bee starter kit and have stock available. See Frana after meeting if you would like to purchase.

The meal gathering at the West End Hotel was very well attended and enjoyed.

Discussion on the TK beetle catching mats, Dennis asked about the success rate of others which wasn't good. He suggested to give them a good rub up with a wire brush before placing them flush against the side wall.

Paul mentioned about the up and coming ECO Fiesta and the need to have the TDBA meetings in town immediately afterwards to ensure prospective members can feel they can attend.

For June, the meeting will be in Cranbrook at Mick Taylor's place and the July meeting will be at Sonya's place in Gulliver. A big thank you to those people. May meeting at Jon and Frana's.

Correspondence:

- plenty of memberships have been paid in the past 3 months
- An invite to a discussion day in the south regarding a honey levy to better promote our interest for the future.

Continued—pg 3

Minutes of the Last Meeting— continued.....

- QBA reminding us about May being Honey Month and a way to promote our club.
- Quadrant Australia is promoting Ag-tours to different countries.
- Various emails regarding Apimondia and other bee related products.

Moved Grant Sec. Doug Mc.

Treasurer's report: Doug Mc, reported that we are healthy.

\$2428.19 plus the money to be banked today from new members and sales of traps.

A member asked for a list of what Doug holds in stock and prices. Grant to look into that for the next newsletter.

Moved Dan D. Sec. Dave T.

General Business.

Members are asked again to do an icing sugar shake of their bees to check for varroa mite. **Please report any test results, particularly negative ones,** to Rob Stevens.

Iris and Peter M. gave members a run down on the "Queen of the Sun" film that will be showing next Friday night (28 Feb) by the Permaculture group. Ron thanked them for representing our Assoc.

Ray spoke about the QBA emails regarding Honey Month. We may have the opportunity to show a film about bees called "More than Honey." We will have to obtain a copy of the DVD and seek a place to show it. The University of Perth was involved in its production and Ron asked if members could drive this by organizing something that could benefit the club. Thanks to Iris, Frana and Peter for offering to secure a suitable place to run it for the club.

Dave M. mentioned that the latest ABK had a good article on how to trap small hive beetle.

Ray mentioned that Mrs P. had passed away and he thanked her for the opportunity to know her. (see Feb newsletter).

Jon Mc. advised that at the next meeting, he will be putting forward a motion to have the Assoc become an incorporated body. Ron thanked him for the work he has done in getting this ready for the Assoc. For those who want to know more regarding the pros & cons for such a move for our club. Please refer to this web site.

<http://www.fairtrading.qld.gov.au/incorporated-associations.htm>

Ray had a few spare newsletters.

For those organizing Queens, the club does not do it for you, it has to be done by yourself or in conjunction with other club members. Grahame Armstrong will have some ready at the end of March.

Ray mentioned that he will be stepping down from all positions in April and the club needs a replacement. After some discussion about it being a one, two or three man job, Wayne Taylor is to take on the position with Ray training him over the next 2 months. Ron thanked Wayne for his willingness to do such a job.

Life member Dave Hoey brought some gear to along to the meeting to be sold to members. Could view it after the meeting.

Rob Stevens spoke about Apis Cerana. Bee surveillance to be stepped up. Keep the sugar shake tests going but there is an alternative alcohol testing method available but this will destroy the bees.

Rob needs at least 5 members to help. More surveillance hives are needed within the 5 k of the port, particularly the swarms collected. We need to increase our testing and have it become a necessary part of working with bees.

Rob will organize a pest and disease evening for members. AFB is a notifiable disease. Brood testing is free however postage cost.

Mozzie spraying in town, beekeepers beware of the possible side effects.

Rob thanked Grahame, Ray, and Lindsay for their help in the sentinel hives

Jon and Frana volunteered to be a front line person for our assoc.

Ron asked for hives to be available for our newer members, Grahame Armstrong has a few nuclear hives available.

Dave M. asked about plastic foundation.

New rego numbers John Sheehan S1476. Alli Mende M1092

Life member Dave Hoey has a new address in Kirwan.

The newer members may like to have a meeting at their place sometime in the future. Have a think about it.

Please feel free to contact each other (use the membership list) and ask advice or help with the keeping of bees. Please look up addresses in our membership lists sent before the Feb meeting.

Future Meetings

March meeting	Kirsty's place in Oonoonba
April	Allie's place in Mt. Low
May	Frana and Jon's place? in Kelso
June	Mike Taylor's in Cranbrook
July	Sonya's place in Gulliver.

Meeting closed 3.45. Coffee, tea, and some eats and lots of discussion were enjoyed.

The Pentland Visit. ..

One of our long term members lives in Pentland so getting to meetings has been a tad difficult. Rhonda needed bees since the drought last couple of years out there took its toll on her bees. I was thinking I could split one or two of my hives and re-queen them but the weather didn't comply with my wishes. I eventually sourced some bees from Graeme Armstrong so I bought 2 nucs from him.

I picked them up from his place and it wasn't the bees causing us to jump around, it was the mozzies so no chatting that evening I can tell you.

The bees spent 5 days at my place in Cranbrook collecting Pollen and nectar before I loaded them into the Pajero on Friday the 28th and taking them out to their new resting place.



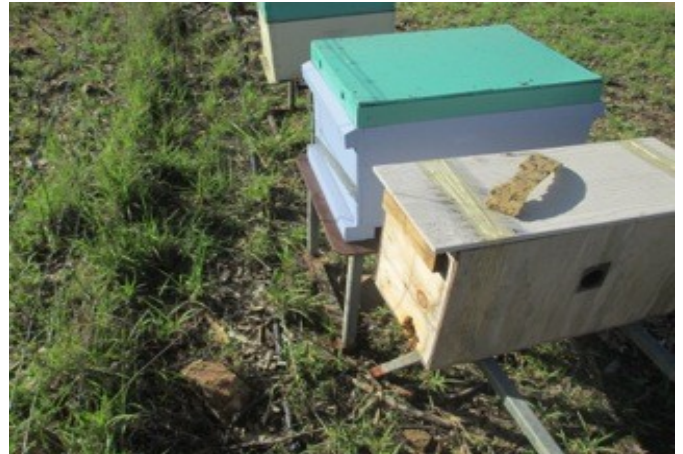
The nucs in Cranbrook. Note the air hole in the side!

I made good time, arriving to a chorus of dogs that let Rhonda know I was there. It was around 9.30. She had the resting place for the bees all set up. A quick transfer from the car and the unplugging of the entrance all went smoothly. The night was just lovely. I set up my camper and was ready for tea and a chat. We talked mainly about bees funnily enough.

The next morn we set to work transferring the frames from the nuclear boxes into Rhonda's standard boxes adding more frames of drawn comb to each box and sorting which would be the best arrangements of the brood and honey frames. Very complicated stuff you know.

The bees were very, very quiet.

We spied both queens one of which was just gorgeous, the lovely honey colour, and a mild temperament.



One of the nucs in Pentland.

The other queen was just fine as well but her lower abdomen was just shaded with a tint of brown. She was unnerved. We watched as she checked out an empty cell, had an egg half out of her bum and promptly turned around and dropped it into the cell. Much flurry from the nurse bees after that while the queen calmly sniffed out another cell.

Pretty special I say after she had travelled 250 k's the night before.

After the organisation of those hives finished, and to Graeme's credit not a beetle in site, no beetle sited all weekend in fact, we sat and congratulated ourselves on a good job done.



The latest addition to the farm along with the bees.

The bees were working well enough each time we checked on the hives over the weekend. A good job done.

Grant Whiteford and Rhonda Imhoff....

Oils ain't oils – A little bit of pheromone chemistry.

For the next time you check your hives, spare a thought to whether you have oil on your hands before opening the hive.

The main ingredient in many vegetable oils (eg olive, peanut, macadamia, sunflower) and in many animal fats (eg chicken and turkey fat) is a fatty acid named oleic acid ($C_{18}H_{34}O_2$ cis 9, for all those chemists out there). It's also the main ingredient in our human fatty tissues. HOWEVER - It's also an important insect pheromone – the chemical cues that seem to control so much behavior in the bee hive.

Oleic acid is also emitted by the decaying corpses of many insects (including bees and a genus of harvester ants), and this triggers the instincts of workers to remove and discard the dead body from the hive. If a live bee is daubed with oleic acid, its neighbors' drag it out of the hive and discard it, even while it's still alive.

A related chemical – ethyl oleate or EO - is produced by bees when foraging on fermented nectar. It's a combination of the ethanol from the fermented nectar and the bees natural oleic acid. EO is a strong pheromone that delays the physiological transition from a nursery bee to a worker bee that normally occurs around 21 days after adult emergence. This may prevent more workers from developing and foraging on contaminated nectar (possibly – that's my theory only).

So when next opening your hive, spare a thought for the poor bees who have to overcome your fumes, after shave, hand cream, deodorant etc and figure out what signal you are giving them – peaceful or aggressive, - stay calm or attack!

en.wikipedia.org/wiki/Oleic_acid

Insect. Biochem. Mol Biol, 2012 Jun;42 (6): 404-416

Lindsay Trott....

An interesting opportunity..

An interesting suggestion was received by email this month from Marion from the Queensland Beekeepers Association Inc.

This is an opportunity for our club to perhaps do something similar at one of the City Council libraries.

Hi Everyone,

I want to pass onto to you a project that the Bayside Beekeepers Club is planning for Honey Month in May.

The Club has approached their local library about a static display and the Library is most willing to do this. The Club is to supply the material for the display which will remain on view for the full month of May and, at no cost to the Club.

I believe that most libraries have an area, usually close to the Entrance, where displays of this nature are often placed. This would be an inexpensive project that your group may like to investigate with your own local library. Such a display would be seen by the many people who would visit that library during May.

If you have any other ideas that are in the planning or being organized please consider sharing them for others to consider. Throughout all of Queensland, let's promote our unique and wonderful Australian honey and the importance of honey bees to our food security – particularly during the month of May.

The Qld Beekeepers Association is presently planning a display at Parliament House in Brisbane during the first week that Parliament sits in May. This display will be particularly for the attention of the Politicians, their advisors and the many visitors that pass through the House.

I look forward to hearing more of your activities planned for 2014 Honey Month.

Kind regards,

Marion Weatherhead

Marion Weatherhead

Qld Honey Month Co-ordinator

(for the Queensland Beekeepers Association Inc)

Celebrating National Honey Month in May 2014

Trevor & Marion

Weatherhead

Queensland Beekeepers Association Inc

1416 Middle Road

Peak Crossing Qld 4306

'Zombie bees found in San Francisco Chronicle hives!!

Professor John Hefernik has warned.

After several months of using a light lure to trap our Chronicle bees at night, researchers at San Francisco State University have found zombie bees in our hives.



A phorid fly laying eggs inside the abdomen of a honeybee. Photo: Christopher Quock, San Francisco State University

In late July, a sample of our bees taken to the S.F. State lab proved to be infested with *Apocephalus borealis*, a small parasitic fly that lays its eggs inside the bee so its hatchlings devour the host from within.

The invasion causes the bee to have a neurological meltdown and exhibit strange behaviour, such as flying at night toward light. Eventually the bee dies, and the fly pupae emerge from the soft part of the bee's neck. Which is exactly what happened after biology Professor John Hefernik and graduate research assistant Christopher Quock collected 18 bees from our rooftop apiary on their fourth visit. Five days later, they spotted seven fly pupae that had emerged from one of our bees. "I'm not surprised we found zombie bees, because we've found them in a majority of the hives we've looked at," Hefernik said.

The researchers have found zombie bees in 77 percent of the Bay Area hives they've checked, including colonies in Walnut Creek, Marin, Redwood City, on their own campus and now atop The San

Francisco Chronicle. *Apocephalus borealis* has also been found in commercial hives in the Central Valley and in South Dakota.

San Francisco State just launched a citizen scientist website at www.zombeewatch.org to collect more data from backyard beekeepers.

What is unclear is whether honeybee colonies have been successfully living with the flies all along, or if this is a new threat that's growing.

Commonly known as the phorid fly, there are 4,000 species worldwide, but only a handful that attack honeybees, mostly found in Costa Rica, Mexico and Colombia. *Apocephalus borealis* are native to North America, first reported in Maine in 1924, and later Alaska and New Mexico - but those flies were attacking bumblebees and paper wasps.

So it was shocking when Hefernik and Quock discovered flies emerging from honeybees they collected at San Francisco State in late 2008, leading beekeepers to wonder if phorid flies are a major contributor to the annual 30 percent drop in the honeybee population known as colony collapse disorder.

To get closer to an answer, Hefernik and Quock are gluing glitter-size radio tags on campus bees to monitor the bees' comings and goings, with a laser beamed over the entrance to their laboratory hive.

The goal is to see whether parasitized bees are also leaving the hive during the day. They are trying to understand if bees are sacrificing themselves and saving the colony by abandoning it. Right now, our Chronicle bees have what Hefernik describes as a "light infestation." But it could get worse.

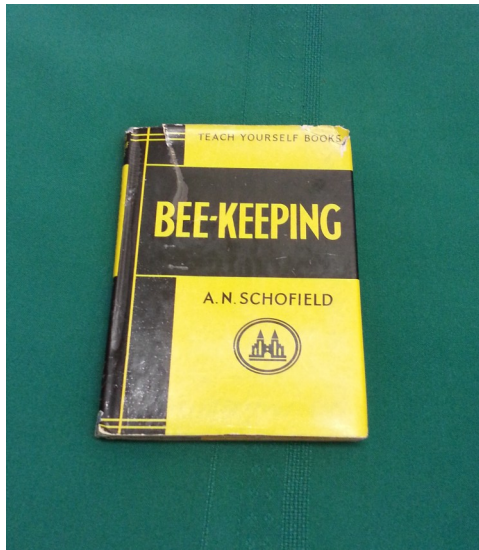
In California, parasitism peaks in fall and early winter.

"There's nothing a beekeeper can do at this point until we know more about colony behaviour and co-existence, or not, with the fly," Hefernik said.

Meredith May is a San Francisco Chronicle staff writer and beekeeper. Email: mmay@sfchronicle.com

Book Review from TDBA Library

To all members who weren't aware the TBDA has a reasonably well stocked selection on booked which are readily available to all current members.



Jon McKinstry is our club librarian and has reviewed one of the books on offer. This month's book is **“Teach Yourself Books ‘Bee-keeping’”** by A.N. Schofield. While the book's origins are English and was first printed in 1943, this 1958 revised edition has some very useful ideas for hive management.

As relatively new bee-keepers, we are always on the lookout for better bee-keeping practices. This book has a few ideas that have assisted in improving our bee-keeping.

While we were already aware that bees collected, nectar, propolis, pollen and water, we didn't know about honeydew. This book offered a more detailed explanation of when the nectar flow is not sufficient, as an alternative bees can harvest a 'sweet sticky substance' that aphides secrete.

It is a rank-tasting substance, dark in appearance and is stored separately from the nectar. The book suggests that, after uncapping, the honeydew be removed to avoid spoiling the honey.

When I turned to the chapter “How to Work for Surplus Honey” my initial thought was its unlikely this will hold any ‘nuggets’ for us. How wrong we were! It explains the advantages of ‘stimulating’ the hive and more importantly, how to arrange the brood frames so that the queen has the best egg laying opportunity. It also has a section on ‘Capacity of Brood Chamber’.

This has resulted in providing our hives with an ideal box on the brood super during the warmer months.

The queen has the equivalent of 15 full frames to build the colony's numbers up during spring, summer and autumn seasons. This increased brood capacity and has worked well for us.

It is worth noting that this is a ‘cold climate’ book and there is a lot of information or suggested practices that we have disregarded due to the Tropical climate of North Queensland. As a result there is some parts that would probably not interest experienced or commercial beekeepers however for the less experienced, this book has some gems that are worthwhile flushing out.

Your beekeeping management will definitely benefit from a quick read of this little book. As this book is freely available to club members, we think that it is worth borrowing for a read.

Jon McKinstry
Club Librarian



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See our Treasurer—Doug....



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