

BEES NORTH

February 2012

Newsletter of the Townsville & District Beekeepers Association

President: Dennis Anger Ph: 07 4782 9246

Secretary: Grant Whiteford Ph: 07 4728 3051
grantwhiteford4@optusnet.com.au

Editors: Chris Megaw / Michael Friis
ctmegaw@gmail.com
mfriis76@gmail.com

NEXT MEETING

Sunday 19th February 2012
2PM

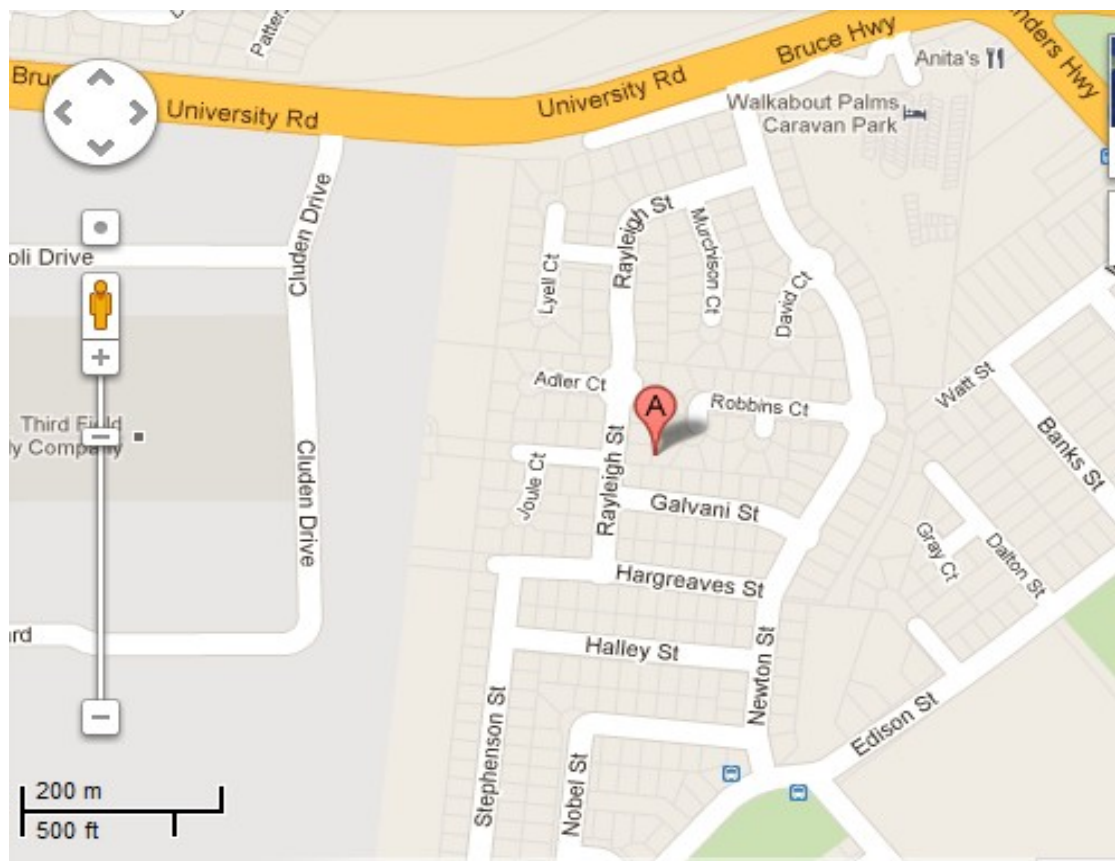
Where?
Ray Berkleman's place

<http://tiny.cc/185pb>

9 Rayleigh St,
Wulguru.

Please bring a chair. Tea and coffee is provided.

All members, families and guests are welcome.



Welcome to 2012!

I hope everyone has had an enjoyable Christmas and those that have to have moved back into the swing of things at work.

Special thanks to Ray for articles submitted, it makes putting the newsletter together easier and more interesting.

Apologies for not getting out any email updates but I'm afraid real world commitments have left little time for searching, forwarding and experimenting. That said, I think the email list proved its worth early in the year when the Asian Honey bee arrived in the port and I was able to quickly forward the ABC report.

Please keep any email updates coming, suggestions for formatting and let me know if I have not bcc'd correctly. I know most people don't want their emails bandied about so hopefully I have it set up so that doesn't occur.

Michael is taking a well earned break in foreign lands after working through Christmas so any faults with this newsletter they are entirely mine!

Chris

Points to Note

- Asian Honey Bee in Townsville will be discussed at the upcoming meeting.
- Those members registered with the DPI would have received the warning/information letter with respect to the Asian Honey Bee.
- The club has Apathor traps available again for \$6.00
- Details of honey flow wanted:
 - Mike F and Chris M visited the DPI hives on the invitation of the DPI. Both hives had honey and approx 30KG was extracted on site.
- The wet season has increased the numbers of SHB with at least one hive being slimed out completely in the Alice River area.
- **Graphic designers!! We need a logo for the newsletter!!** I'm flat out painting my shed if anyone has any submissions at all we will gratefully run any ideas on a rotating basis and maybe have an informal vote on them later in the year.

*** My apologies to Ray and the readers but I was unable to get the figures to come across into this document. If anyone would like the full article (with figures) please email Ray or myself and we will send you the full PDF document *** Chris M

The effect of hive entrance size on temperature and small hive beetles

One of the nice things about this club is the opportunity to visit other member's places and seeing their beehive set-up. Over a few months it dawned on me that there seems to be two schools of thought on the size of hive entrances for our tropical climate. One school of thought seems to be that you keep the entry size as small as possible (100 – 150mm) so that guard bees can adequately defend them against intruders, like the small hive beetle. The other school of thought is that you make the hive entry the full width of the hive (~430mm) and give the bees a fair chance at keeping the hive cool through the heat of the day, especially during our warmer months. So which approach is the better one for our fair (or not-so-fair) climate?

To investigate this question, I set up a brood box with an entry that ran the full width of the hive, 10mm high, and fitted with a sliding door that could be opened and shut to any opening size. The brood box was populated with 10 strong brood frames, a new queen, and on top, a super full with workers – all up, a good strong hive! A temperature sensor was placed in the middle of the brood box, another in the middle of the super, a third on top the super just under the lid, and a fourth outside the hive in a shady spot to measure ambient temperature. All sensors recorded the temperature at 10-min intervals 24/7. Every other day, I would pull the door slider out to make the entrance full width, then slide it closed to a 100mm entrance the following day. I did this for a fortnight and collated the results.

To make sense of the results, I thought it might be useful to examine the raw temperature data first.

Fig 1. Ambient temperature and temperatures under the lid of the super during the experiment.

Fig 2. Brood temperature and temperatures in the middle of the super during the experiment.

The first thing to notice is that ambient temperatures are much more variable than temperatures under the lid, especially at night time when ambient temperatures are several degrees cooler. Maximum daytime temperatures are a bit warmer outside on some days but on other days they are about the same (Fig 1). There were a few days of cloudy weather with a shower

of rain in the middle of the experiment which is clearly visible in the temperature trace (17 – 21 Oct). For the most part, bees seem to be able to keep even the top part of a white hive close to, or slightly under, ambient temperature. The second thing to notice is that temperatures in the middle of the super are much more stable compared to outside and temperatures in the brood box are highly stable in comparison. In fact, brood temperatures are being kept to a very precise $34.9\text{ }^{\circ}\text{C} \pm 0.7\text{ }^{\circ}\text{C}$, irrespective of ambient temperatures. In the words of Dan Donovan: "Everything is about the brood!". Any small excursion outside this nurturing temperature range means malformed young, or death, and bees go to extraordinary lengths to ensure this does not happen (perhaps more about this topic another time...?).

Since the effect of hive opening size is about allowing the bees to keep the hive cooler during the warmest part of the day, only temperature differences between 10am and 4pm are shown and averaged over the life of the experiment. Differences represent ambient air temperature minus those under the super lid, super middle and brood box for each 10-min recording interval (Fig 3).

Fig 3. Temperature differences between ambient air and various locations within the hive (lid, super and brood box) between 10am and 4pm.

Temperature differences were on average negative, meaning that between 10am and 4pm, the inside of the hive was mostly warmer than outside. The crux of the matter however was that there was no significant difference in temperature control during days with a small entrance compared to days with a large entrance. Temperature differences at various locations within the hive were almost identical between treatments, meaning that entrance size makes little or no difference to hive temperature. What I could not measure however, was whether bees had to work harder at fanning the hive opening when it was closed to within 100mm. On casual observation, my guess is not, based on the

number of fanning bees at the entrance. However, this is only conjecture at this point.

The other side of the coin is whether the larger hive entrance had any effect on small hive beetle numbers. While I could count beetle numbers in the oil trap inside the experimental hive during the fortnight, I was lacking an adequate control. I did have a nucleus hive (brood box, no super) next to the experimental hive and, for what it is worth, there were two beetles in the nuke versus 22 in the experimental hive at the end of the fortnight. This does not prove without doubt that a larger entrance allows more beetles in, but the evidence is certainly leaning that way. In conclusion, a larger opening does NOT keep the hive cooler – at least not under my test conditions. However, it probably does make it more difficult for guard bees to keep intruders out. For my money, I'll go with the small entrance.

Ray Berkelmans

EKKA Honey Court

I am pleased to be able to inform members that Adrian Jones has agreed to take on the role of Coordinator

for the Honey Court at the Ekka. Thank you to Neville and Jessica Bradford for offering to take on the role if no one came forward.

This year is a new experience. The old Agricultural Pavilion has been pulled down and we are to be

located in the ground floor of what was the old sample bag pavilion. It means starting from scratch and

everything has to be designed so we can shift it in within a couple of days before the Ekka commences

and shift out within a few days after it closes.

We also have to pay a lot more for the space than we paid in the old Agricultural Pavilion. So there are

many challenges that will face Adrian. Marion

Weatherhead will be available to help Adrian with information from past years.

There has been a preliminary meeting held with the RNA staff to introduce Adrian to them and discuss

what space we will occupy next year.

Ray Goldsworthy is in discussion with the RNA about the competitive section. The RNA staff have not

been around for long and did not know the history of the QBA's involvement in this part of the Ekka. Ray

has been able to fill them in on what happens and

I was able to tell them the history of the QBA's involvement. So hopefully there will be a competitive section next year but not sure if it will be near the

Honey Court.

So future reports on the Ekka will come from our new Co-ordinator, Adrian Jones. I am sure that Adrian

will be approaching some members to help out in certain areas.

Trevor Weatherhead

16 December, 2011

Asian Honey Bee update

Advice 109 – 16 December, 2011

The usual telephone hook-up was held today with Daniel Jones and myself on line. Detections since the previous Advice are:-

IP516 was a swarm at Manoorra IP517 was a nest at Bentley Park.

IP518 was a swarm at the Cairns Reef Fleet terminal.

IP519 was a nest at Machans Beach.

IP520 was a nest in Cairns City.

IP521 was a nest in Cairns City.

IP522 was a swarm in Cairns City.

IP523 was a swarm at Bentley Park.

IP524 was a swarm at the Pier, Cairns IP525 was a swarm at Portsmouth.

IP526 was a swarm at White Rock.

So far 64 volunteers have been to Cairns. There

are none programmed for the foreseeable future. We still need volunteers and a weekly roster is now in place but if you want to stay longer than the week that will be no problems. Bill Weiss is organising rosters and will book accommodation if required. Please contact Bill on: 02 6732 1263 or 0428 669 578 or email to beeweiss@gmail.com if you wish to volunteer.

The Scientific Advisory Group (SAG) had its telephone hook-up on 14 December. The Transition to Management Plan is being finalised with the SAG meeting in Cairns on 18 & 19 January to finalise their advice to the Management Committee on the proposals within the plan.

Trevor Weatherhead

Townsville and District Beekeepers Association. meeting 20-11-11

President Dennis welcomes club members the new members, and visitors to Doug and Sonja's place. 2.05 pm.

As it was windy we didn't open hives but observed them from a distance.

Attendance: as per signed book. well over 30 members and guests including Clem from a south Sydney bee club group. 5 new members signed up.

Apologies: Chris McGaw; Rhonda Sheens

Previous mins accepted as read, Moved: Doug Mc. sec: Dave M .

Minutes and Matters Arising:

NAB held over for general business.

Peter Warhurst meeting with TDBK on Tuesday 29th Nov, at the DEEDI (DPI).

AFB around again as reported by Graeme Smith.

Sandwich board and banner still work in progress.

Other traps yet to be bought (another new kind of trap.) Peter Warhurst recommended.

Christmas do at Sherriffs Park the first Sunday in December. Lunch provided for club members and families but we need to know numbers. Let Doug, Grant or Dennis know.

Correspondence:

emails a number of membership renewals
DPI kits arrived.
letter from NAB bank.

TREASURER'S report: as presented by Doug Mc Bride. again healthy with \$3200 in the bank.

money to be spent on Christmas party, SHB traps, banner and sandwich board in the near future.

Accounts for payment approved.

Moved Dennis,
Sec Grant

General Business.

The January edition (news flyer) will only be sent to members.

please pay up if you wish to continue to receive news and remain a member.

The February newsletter will be sent to financial members only.

August is when Membership is due. please send in your form if you haven't all ready members can pay online shortly, Chris M to organise, this should make it easier for some.

Peter Warhurst yet to be in contact with us about a visit to Townsville. (if)

We need to know numbers for the Christmas gathering on the first Sunday afternoon in December.

The NQ Register had articles about SHB and the asian bee.

Mark Inman is seeking a 12 frame extractor (electric) Contacting Mike Friis to put an add in the newsletter.

Bowen beekeepers need support. Dennis

suggested a party get together and have a gathering down there.

Grant contacted the SUN newspaper about swarms appearing in Townsville. Had a good response from the public and we have new members here at the meeting today. Will try and keep it up and invite the journalist to a meeting.

Mannie spoke about the dangerous yeast found in the slime the SHB cause. He had difficulty with it and our members should always use a mask when working near or cleaning up frames. **very important. see page 208 -209 in the latest ABK.** THE REGULAR NEWS.

Swarms still being collected by members. Dave M spoke about a bloke in Brandon collecting down there. Swarms have been found in M'burra, Oonoonba, Garbutt, Gulliver, Vincent. Mike J spoke as to how to collect some swarms and how to deal with them after you have secured them. Mike James spoke to the meeting, Graham Armstrong needs to train people in catching queens, He wants to expand and Mike will seek more information for members.

Viginna spoke on her Dave's queen breeding escapades.

Mike J spoke on his beekeeping down south this season. Had his bees on canola plants and said the honey candied on the frames. He spoke highly of the Apithor traps and how to reuse them from one hive to another. Good value for money he said and when the beetle isn't around to put the traps in a plastic bag and place in the freezer until needed again. Doug showed the newer members the traps. They do need a flat bottom board to work the best.

Dennis spoke to the newer members about how to set up a hive and the benefits of joining the Club and being a registered beekeeper.

Ron R spoke about his queen cells in his hives. for those who will be needing queens, Des Covey for caucasian queens from Gracemere, Dennis uses him.

Clem spoke to the meeting about his beekeeping in the Illawarra area and they have the same problems as us with SHB and chalk brood. He mentioned that there was lots of swarming down

there as well.

New members signed up:
Denver Hill 4775 4616 Garbutt,
Gary Swaine Rangewood 4788 7070,
Ron McGlinchay, Annandale 0429 463 183,
Jon McKinstry Kelso 0413 765 192.

Meeting closed 3.30pm

Members enjoyed tea, coffee and cake supplied by the members.

Dan Donovan 0428 218 816 offered to help new beekeepers to set up with selling bees and nuclear hives to them. Contact him if you need bees and equipment.

If you wish to have your newsletter through email, forward your email address through to Mike and Chris. This will save them time, you paper work and the club a little money.

If you have interesting bee stuff, please email to Chris M or Mike F so it can be shared with other members.

the secretary's email is Grant's email, grantwhiteford4@optusnet.com.au.