Townsville & District Beekeepers Assoc Inc.

Issue No: 10 October 2017

Contact Us

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Next Meeting & Annual AGM

Sunday 22nd of October
Hermit Park State School
Starting at 2pm

Followed by AGM All Members Welcome

Christmas Lunch

Sunday 10th December
Will be held at

Welcome to our newest members:

Michael. O – Kelso
Paul & Shari. W – Alice River
Colleen & Lyall. W

CLUB SHOP OPEN

Saturday 14th of October

MEMBERSHIP

If you have currently NOT paid your membership, you will be deleted from the mailing list as of the end of October! **PLEASE PAY**!!

Saying Goodbye to a well known beekeeper!

Saying goodbye to Graham Smith "the beekeeper".
Mr Graham Smith, born 16 Apr 1928.
Graham started his beekeeping as a schoolboy living in Brisbane working and helping other beekeepers after school and on the weekends. From this he got his first hive which over the years grew to over 25 hives. He had other hobbies such as archery, pigeon breeding and racing, while he completed an apprenticeship in tool making. In 1958 Graham met Charles Roth an Apiary Officer. Charles mentored Graham and taught him beekeeping including identifying trees and honey flows, something Graham continued to be very passionate about. He would impart his knowledge to those newbie beekeepers he was mentoring.
"That was me" I was a newbie beekeeper, unfortunately I was not a very good pupil and could never remember the Latin names for the trees he would point out as we drove around Townsville and up to Hervey's range checking hives. In the end, despite much persistence, he reluctantly gave up on me and told me I wasn't a very good student on flora.
Graham moved to Townsville in 1962, he had sold all his hives when he left Brisbane, taking up work at the Queensland University and later the James Cook University. He got his first hive in Townsville from a swarm at the strand which he put in a tea chest as he did not have any hive boxes. Eventually Graham made his own boxes to put his bees in and had over 70 hives. During this time Graham was called out regularly in swarm season up to 5 times per day and the most being 36 in a season. The council would call the university to ask if Graham could collect swarms, sometimes holding up traffic, while he swept the bees off streetlights.
Graham was an excellent tradesman in toolmaking. He met John Guilfoyle who had moved his beekeeping equipment business to Townville. Graham and John worked together to raise queens to sell, but realised it was too difficult at the time, so they concentrated their time and effort on developing, repairing and making adjustments on beekeeping equipment such as honey extractors. 1963 Graham became a Townsville Honey Wholesaler for an Apiarist located in the Tablelands.
I spent quite a few weekends at Graham and Margaret's place learning how to make boxes and put frames together with the wax foundation for all my hives. Graham being a tool man taught me what size nails are the best for the frames and what diameter wire you should use for the frames, and why the thickness of the wax foundation was important. And it makes sense, I like every beekeeper

A bee poem…..

He wanted me,

But not to keep

You see, I was only honey

I fed the needs, of the bee

So he could please the Queen

has tried to do things the easy way or the cheap way but you do come unstuck and I thank Graham for being so pedantic with me in teaching his way to make equipment.

Graham was also a member of the bush walking club in Townsville where he met his wife, Margaret, and courted her for 18 months, before they married in 1965. They had 4 children. Graham was disappointed that his children and grandchildren did not have his love and passion for beekeeping. Graham continued to mentor newbies like me and we had many enjoyable days making equipment and inspecting hives and learning about bees and honey flows.

Now we all know Graham loved to have a chat and it was during these time whilst making boxes or having a cup of tea that I would learn so much about the behaviour of bees or what do with a particular problem that I had come across with my bees. Graham's expansive knowledge of bees, flora and honey flows especially in North Queensland made him an excellent mentor to newbie beekeepers like me, Steve and Carla. He had so much knowledge to impart and would be happy to chat for hours and give advice on any question that you asked him. He had a theory about everything right or wrong to do with beekeeping, equipment and honey flows. His theories were always worth listening to and considering as he had over 70 years' experience and knowledge in beekeeping.

Graham was always welcomed at my place which became an area where he would come over on a Sunday and mentor newbies on the simple things such as how to hold a frame, what to look for in brood patterns and which tree we could expect to flower next. Many of us newbies were told "well you have made a typical beginner beekeepers mistake" many a time. There are many people here today who will thank graham for being their mentor when they have that light bulb moment in their beekeeping when a particular scenario happens that Graham has talked about.

Graham along with Dennis Anger was a founding member of the Townsville bee keeping club in 1983. The start of what today is known as the Townsville and district beekeeping club which has now over 200 members. If we had membership numbers, Grahams would be 1 and Dennis 2 respectively. Graham was a beekeeper for more than 70 years, he joined the Queensland beekeeping association when he was 17years old and had attended more than 60 conferences, and he qualified for his 25 year membership badge as part of the QLD beekeepers association more than 25years ago. Graham's lifetime dedication to beekeeping and as a long term and founding member of the Townsville beekeeping club saw Graham become an honorary member in December 2016.

I met Graham nearly 5 years ago. I got my first hive from a swarm in a trailer in Kirwan which Graham and I slowly moved into a hive. Our friendship developed "me the student and Graham the teacher". I will have many fond memories of our trips to Hervey's range and inspecting my hives and being told "well you made a typical beginners beekeepers mistake" I am going to miss the ability to ask the question knowing that Graham would have an answer for me.

RIP Graham
Sonya Verburgt
Steve and Carla Kernosvke

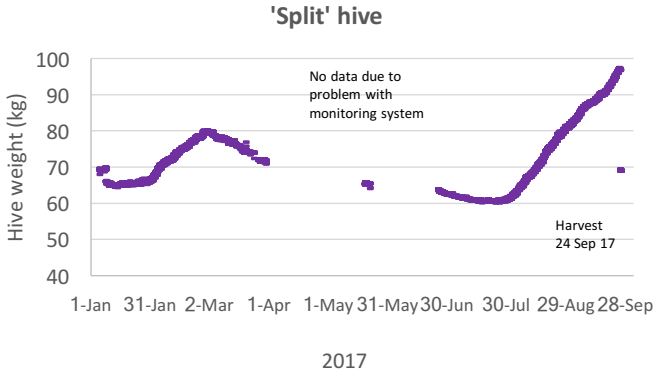
Bowen Bowls Family Weekend

Hip replacement anyone?

Don't forget the Bowen Bowl weekend with Central Queensland Beekeepers Club have invited us all to Bowen for a weekend of full laughs, giggles and sore backs on the weekend of 28th/29th of October. This will be the last notice for it as BOOKINGS ARE ESSENTIAL!! Accommadation is at the Big 4. Please contact Paul Marsh as soon as you can to book your place on paul@bee2u.com.au.

It's Harvest time from the Gold Coast!

Having a hive weight monitoring system has allowed an unusually detailed look at the seasonality of honey bees here on the Gold Coast. The truth is that my bees have done only mediocre for most of the past year and have only just recently 'picked-up'. This particular hive, named 'Split hive', started life as a five-frame nucleus hive in early September 2016. It got supered in early December. Two honey frames were taken off in January and a second super was added on 26 February 2017. February was a good month for bees with steady hive weight gain for the entire month. It was a scorcher and devastatingly dry (14mm rain for the month!). The double-supered hived reached 80kg but no honey was taken off. At the start of March the long-awaited rain finally came, but with it, the honey production stopped. We received 617mm of rain for the month. It more than made up for February's shortfall but my poor bees suffered. In fact, for 5 months they went backwards in the honey stakes, losing 20kg until they finally picked up again in late July. From then on it has been up and up all the way, coinciding with the grevillea coming into flower and in September many other spring-flowering plants. The hive put on 36kg in seven weeks and by then I couldn't resist taking some honey off. I took off 12 frames, replacing them with stickies for a net (theoretical) total of 28kg of honey. These frames went into the freezer awaiting some more frames before extraction. The harvest was indeed sweet, especially after watching the hive go backwards for so long. It was an eye-opener though to



see how long an “off-season” can last in this neck of the woods and also how much reserve honey to leave the bees to get through the tough times!
Vital statistics (since the upturn on 28 July):
Total weight gain: 35.91kg
Daily average weight gain: 630g
Highest daily weight gain: 1.24kg (17 Aug)
Lowest daily weight gain: 120g (9 Sep)

Ray Berkelmans
Gilston (Gold Coast)
****

TDBA inc Office Members 2016/17

***President:**……Alan Ziegenfusz……president@beesnorth.com.au*
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***Vice President:**……Mick Taylor……cranbrooksolar@bigpond.com (TBC)*
***Secretary:**……Pauline Biffen ……secretary@beesnorth.com.au*
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Paul Payne……trapper4812@gmail.com
Mark Quadrell……markquadrell@gmail.com

Townsville & District

BEEKEEPERS

ASSOCIATION

As it gets closer to swarm season: Swarm Contact List

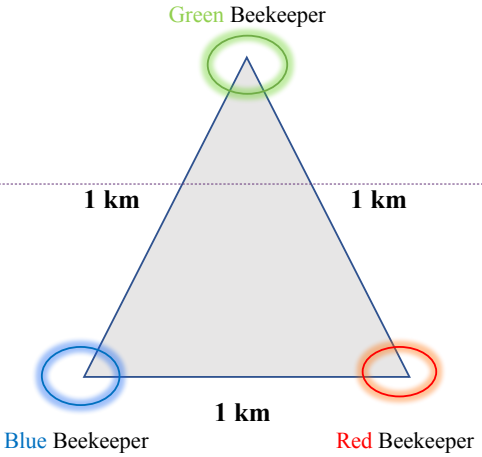
Jon & Frana McKinstry, **Kelso** - 0413 765 192 (Jon) or 0401 014 948 (Frana)* Wayne Taylor, **Rasmussen** - 0434 745 353 * Mick Taylor, **Cranbrook** - 0428 626 707 * Ben Taylor, **Townsville West** - 4728 4992/ 0428 186 000 * Brendan Arboit - **Ayr** 0419447122 * Steve and Carla Kersnovske - **Kelso** 0417 344 419 * Dave Turnbull **Annandale** - 0458 645 677 * Doug McBride, **Mysterton** - 4775 7465 * Dan & Drew Donovan, **Wulguru**- 0428 218 816 * Grant Whiteford, **Cranbrook** - 4728 3051 * Sharene Dougall, **Bluewater** – 0415426903 * Daniel Horne, **Bushland Beach** – 0437540473* John Pavetto 0488414017, Ian Goulevitch - **Hinchinbrook Area**. Please contact Biosecurity : 13 25 23 for any swarm or strange bee activity in the Townsville region. Any swarm or unmanaged nest either kept or reported to a beekeeper, must be sampled with approx. 200-300 bees or 10% of any nest size and given to Biosecurity Qld for recording and sample testing. Feral (unmanaged nests) must include brood comb samples. Contact varroa@daf.qld.gov.au for any information.

Reg. J with his first frame of honey from a hybrid flow hive!

Even though the flow frames were waxed frames, the bees definitely preferred the standard frames which were done with plastic foundations!!

Ed: Great photo Reg. Thanks for sharing!

Which beekeeper are you??



Comment [A1]:

The Green, Blue and Red Beekeeper - a theoretical scenario.
All hives mentioned are doubles - one brood super, and excluder and a honey super.

JANUARY

The **Blue Beekeeper** has had 6 hives AFB FREE in his back yard for approximately ten years in Triangleville. He knows how to recognise AFB.

The **Green Beekeeper** also lives in Triangleville, about 1km away from the Blue Beekeeper. He also has six hives, but has been keeping bees for about 3 years. He has heard of AFB, but doesn't believe it's a threat to him.

The **Red beekeeper** moved to Triangleville last month. With him, he brought his one backyard hive. It's 'just a hobby' to him.

BEEKEEPING HABITS:
The **Blue beekeeper** works his whole hive - each time he harvests honey, he will check the brood for its overall health, constantly scanning for disease. He has a hive to hive barrier system.

The **Green beekeeper** has other commitments. While he does take honey off when required, he only goes into the brood maybe twice a year - and does what he thinks is a sufficient disease check.

The **Red Beekeeper** got his hive to 'do his part' for the environment. However, he's never had the time for proper training and is actually too scared to work the brood super, in fear of killing his queen or getting stung too much.
THE RED BEEKEEPER'S HIVE HAD AN AFB INFECTION WHEN HE MOVED INTO TRIANGLEVILLE.

MARCH - TWO MONTHS LATER

The **Blue Beekeeper** is working his hives. All is well. However, on his last hive, he notices sunken and perforated cappings on a brood frame. He gets a match stick and tests the contents - a coffee coloured goop ropes out. Another 200 or so cells on the frame are the same. He wraps the sample in paper and posts it off to get tested for AFB. He is 99% sure he has his first case of AFB.

The **Green beekeeper** is working his hives. All is well - he takes 3 or 4 frames of honey from each hive, extracts them, and returns them the same day. He doesn't check the brood so he doesn't realise that ONE OF HIS SIX HIVES HAS A HEAVY AFB INFECTION.

The **Red Beekeeper** goes and checks his hive. He's surprised to see there isn't much honey up top and very few bees. He pull the top super off and looks through the excluder. There aren't many bees at all. He finds a local beekeeper to help him out - they diagnose AFB and dispose of the hive appropriately.

APRIL/MAY
The **Blue Beekeeper**'s hive came back positive for AFB so he dealt with the infected bees, material and components as per the law. His remaining five hives are happy and healthy - and after three months or so, he can be confident he's 'out of the woods'.

The **Green Beekeeper** checks his hives. The first hive he goes into has very few bees left. He checks the brood to find perforated and sunken cappings on nearly every frame.
He checks the other five hives, to find that all of them also have the same symptoms even though there are still plenty of bees left. After getting samples tested, they all come back positive for AFB. His apiary is wiped out.

Summary:

The **Blue Beekeeper** had bad luck but GOOD PRACTICE - he couldn't stop his bees from robbing the Red Beekeeper's hive. However, as he checks his bees often, the infection was limited to one hive.

The **Green Beekeeper** had bad luck AND bad practice. Only ONE of his hives caught the infection from the Red Beekeeper!!!
The other five robbed the dead out from within his OWN APIARY.

Unfortunately, the Green beekeeper will never know this. He assumes that all six of his hives contracted AFB from an unknown source out of his control - he starts to blame a 'nuce he got from here', or a 'queen he got from there' and so forth.

The **Red Beekeeper** will never know that the Green Beekeeper's entire apiary was lost because of the infection he brought into the area. He also decides bees are too much work and gives away the hobby.

THE BOTTOM LINE

If you diagnose AFB before bees numbers drop, you've done all you can (as long as a barrier system is already in place).
If AFB affects any hive to the point where it can be robbed, you have FAILED yourself and your beekeeping neighbours!

Are you more like the **Blue, Green** or **Red** Beekeeper?
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Looking after your girls in the heat

While the heat is turning on, we need to think about others. Not just ourselves and our 'larger' pets.

You can help look after your wonderful honey producing bees by looking around your backyard and shed, and bee surprised at what you can do to make it easier for them.

Here are some easy DIY drinking places you can create at home with hardly any effort.

Try and make simple things, like a small bucket or pot. Fill it with water and add things that will float, like wine corks. This gives the girls a chance to be able to maintain grip while getting a great source of rehydration fluid.

Raid your kids marble sacks. Marbles are another great idea to have sitting in an old plate, saucer or even a shallow container. You don't need to fill the water so that the marbles are covered, as the bees will stand on the marbles and drink away.

Some research done by Kathy Keatley Garvey from UC's Department of Agriculture and Natural Resources, suggests that bees will bring back up to an astounding 4.5 litres a day to keep them babies cool and to dilute the gelatinous food provided by the nurse bee so that the queen, drones and larvae can swallow it!! (WOW – I bet most of us don't drink that much like we should in summer)

See below (Left) a homemade marble bowl. Once set up you will be amazed at the thirsty work these girls do. Below right is another easy set up with just rocks. It's the little things that we can do. They don't have air con like us.

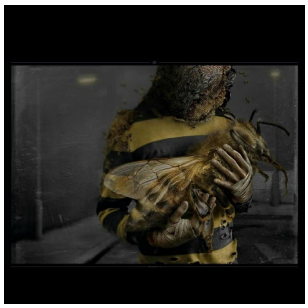
AFB sterilizing has started..

The club has had **8 confirmed cases of AFB**. **PLEASE THOUGHLY CHECK ALL YOUR HIVES!!** If you are not sure, or need assistance, please ask someone within the club, or Biosecurity Qld – Andrew Ygosse or Roger Winton. Everyone is here to help.
This disease can take out and totally destroy your hive! If you are happy to just throw away your money.. please just donate it instead. (Ed: This is in no means to be taken the wrong way. It is just to remind people the seriousness of AFB)

The pallet pictured here is 1 of the 3 that have been sent down to Brisbane to Steritech for sterilization. 1.5 of those pallets was filled with Graeme Smith's materials. These will be sold on completion in order to pass on funds to his family. Please buy what you can as it will be greatly appreciated by the family.

CANADA anyone around March 2018? If this sounds like you, and would like an opportunity of a lifetime.. then now is the time to speak up!! You will be doing a season in a 1200 hive apiary helping out for the season. Get in contact with Paul Marsh ASAP to discuss on 0400 791 745 or paul@bees2u.com.au

NEONICOTINOIDS (A long but worthy read)



A worldwide survey of neonicotinoids in honey
E. A. D. Mitchell,1,2* B. Mulhauser,2 M. Mulot,1† A. Mutabazi,3‡ G. Glauser,3 A. Aebi1,4

Growing evidence for global pollinator decline is causing concern for biodiversity conservation and ecosystem services maintenance. Neonicotinoid pesticides have been identified or suspected as a key factor responsible for this decline. We assessed the global exposure of pollinators to neonicotinoids by analyzing 198 honey samples from across the world. We found at least one of five tested compounds (acetamiprid, clothianidin, imidacloprid, thiacloprid, and thiamethoxam) in 75% of all samples, 45% of samples contained two or more of these compounds, and 10% contained four or five. Our results confirm the exposure of bees to neonicotinoids in their food throughout the world. The coexistence of neonicotinoids and other pesticides may increase harm to pollinators. However, the concentrations detected are below the maximum residue level authorized for human consumption (average ± standard error for positive samples: 1.8 ± 0.56 nanograms per gram).
Neonicotinoids are currently the most widely used class of insecticides worldwide(1). These pesticides are increasingly prevalent in terrestrial and aquatic environments (2,3).Neonicotinoids are taken up by plants and transported to all organs, including flowers, thus contaminating pollen and nectar as well as any fluid produced by the plant(3).There are increasing concerns about the impact of these systemic pesticides, not only on nontarget organisms— especially pollinators such as honey bees (4–6) and wild bees(7,8),as well as in other terrestrial and aquatic invertebrates (9, 10)—but also on vertebrates (11–14), including humans (15, 16). Impacts on such a broad range of organisms ultimately also affect ecosystem functioning (17).As a result, the pertinence of use of these pesticides is currently being questioned in many countries (18), with a ban now implemented in France, and alternatives proposed (19).However, despite increasing research efforts to understand the patterns of neonicotinoid uses and their effects on living organisms, we lack a global view of the worldwide distribution of neonicotinoid contamination in the environment (18) to evaluate the risk posed to living organisms .To build such a map, we measured neonicotinoid concentrations in 198 honey samples from different regions of the world. Bees rely on nectar and pollen sources for their survival. Nectar is transformed into honey and stored in the hive for daily adult consumption and is essential for winter survival. A mature colony can be populated by up to 60,000 adult bees and therefore needs vast amounts of food. Individuals harvest nectar and pollen less than 4km from the hive, on average, but may travel up to 12.5 km away (20, 21), which makes bees distinctive sentinels of environment quality. Indeed, the residue level of pesticides in honey from a hive is a measure of the contamination in the surrounding landscape (22). Honey samples are easy to obtain from a very broad range of geographical localities, thus enabling a worldwide analysis. Analytical protocols have been developed to analyze neonicotinoid concentrations in honey (23), and several studies have quantified the concentration of neonicotinoids in honey (24–26). However, the amount of data is limited, quantification thresholds vary among studies, and a global picture of neonicotinoid contamination in honey is lacking. Here we present a global survey of neonicotinoid contamination in honey samples from all continents (except Antarctica),as well as numerous isolated islands. We measured the concentrations of five commonly used neonicotinoids— acetamiprid, clothianidin, imidacloprid, thiacloprid, and thiamethoxam—in 198 samples (tables S1 to S3) collected through a citizen science project (described in details in the supplementary materials). Overall, 75% of all honey samples contained quantifiable amounts of at least one neonicotinoid. This proportion varied considerably among regions, being highest in North American (86%), Asian (80%), and European (79%) samples and lowest in South American samples (57%) (Fig. 1, figs. S1 and S2, and tables S1 and S4). Thirty percent of all samples contained a single neonicotinoid, 45% contained between two and five, and 10% contained four or five. Multiple contaminations were most frequent in North America, Asia, and Europe and least frequent in South America and Oceania (table S4 and Fig. 1). Frequency of occurrence was highest for imidacloprid (51% of

samples) and lowest for clothianidin (16%). Maximum and average concentrations among positive samples were highest for acetamiprid and thiacloprid (table S5). The frequency of occurrence of individual neonicotinoid in honey samples and their relative contribution to the overall neonicotinoid concentration varied among the regions (Fig. 1). Imidacloprid dominated overall concentrations in Africa and South America, thiacloprid in Europe, acetamiprid in Asia, and thiamethoxam in Oceania and North America (Fig. 1), reflecting regional differences in usage of specific pesticide types. In all regions, at least one neonicotinoid was recorded in at least 25% of samples, and three neonicotinoids (thiamethoxam, imidacloprid, and clothianidin) were recorded in at least 50% of samples in North America (table S6). The total concentration of the five measured neonicotinoids was, on average, 1.8 ng/g in positive (i.e., contaminated) samples and reached a maximum of 56 ng/g over all positive samples (tableS4). This average concentration lies within the bioactive range (27, 28), causing deficits in learning (29, 30), behavior (31), and colony performances (8,32)in honeybees(tableS8). As for the percentage of positive samples, maximum, median, and average concentrations were highest in European, North American, and Asian samples (figs. S3 to S8 and table S4). Maximum residue levels (MRLs) authorized in food and feed products in the European Union (EU MRLs: 50 ng/g for acetamiprid, imidacloprid, and thiacloprid and 10 ng/g for clothianidin and thiamethoxam) were not reached for any tested neonicotinoid. The sum of percentages of EU MRLs for the five neonicotinoids reached 3.6%, on average, for all positive samples, exceeded10%ineightsamples, and surpassed 100% in two European samples (table S1). Our global survey showed that 75% of all analyzed honey samples contained at least one neonicotinoid in quantifiable amounts and that these pesticides are found in honey samples from all continents and regions. Previous studies conducted at smaller scales (regional to national) reported a broad range of frequency of occurrence and concentrations of neonicotinoids in honey, depending on the compound, distance to neonicotinoid-treated agricultural field, and limits of detection. The percentage of positive samples is, to some extent, correlated with the detection limits (table S7). For example, in a British study (26), 16 out of 22 samples were positive for clothianidin, but for all of these samples the measured concentrations (>0.02 to 0.82 ng/g) were below the detection limit of a Serbian study (1.0 ng/g) in which no sample tested positive (33). With the improvement of analytical methods, we can therefore expect that the proportion of positive samples will increase. Differences in methods and especially in limits of quantification (LOQ) render comparisons among studies of little relevance. Thus, to some extent,

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our results illustrate that the ever-increasing analytical sensitivity allows detecting traces of pesticides where they previously were not detectable. But given the increasing use of neonicotinoid pesticides in the different regions of the world, despite partial bans such as the one implemented in the EU, it is also reasonable to expect contamination to have increased over time. Total bans, such as the one soon to be implemented in France, may reverse this trend in the future. Although 75% of samples tested positive for at least one neonicotinoid, concentrations were, in all cases, below the admissible limits for human consumption according to current EU and U.S. regulations (i.e., MRLs). On the basis of our current knowledge, consumption of honey is therefore not thought to harm human health. However, recent evidence for impacts of neonicotinoids on vertebrates (12, 13), including

humans (15, 16, 34), and especially evidence for up-regulation of nicotinic a4b2 AChRs receptors in the mammal brain during chronic exposure and for higher affinity of metabolites versus the parent neonicotinoid (imidacloprid) (14), could lead to reevaluating MRLs. Although the impact of the measured concentrations of neonicotinoids in honey on vertebrates, including humans, is considered negligible, a significant detrimental effect on bees is likely for a substantial proportion of the analyzed samples, as adult bees rely on honey for food, including during periods of overwintering or seasons without blossoming flowers. The increasingly documented sublethal effects of neonicotinoid pesticides at environmentally relevant concentrations on bees and other nontarget organisms include growth disorders, reduced efficiency of the immune system, neurological and cognitive disorders, respiratory and reproductive function, queen survival, foraging efficiency, and homing capacity at concentrations as low as 0.10 ng/g (table S8). One of the challenges of assessing the risks associated with the use of pesticides is to evaluate their impact at field-realistic exposure concentrations. A total concentration of 0.10 ng/g, corresponding to the lowest concentration at which marked detrimental effects were observed on nontarget insects (27) (tableS8), was exceeded in 48% of our honey samples (table S1). Therefore, our results, combined with the growing body of evidence for detrimental effects on bees and other nontarget invertebrates, suggest that a substantial proportion of world pollinators are probably affected by several neonicotinoids. Another challenge is to evaluate the influence of chronic exposure to some neonicotinoids on nontarget insects' sensitivity to other neonicotinoids. Recent studies showed an increased

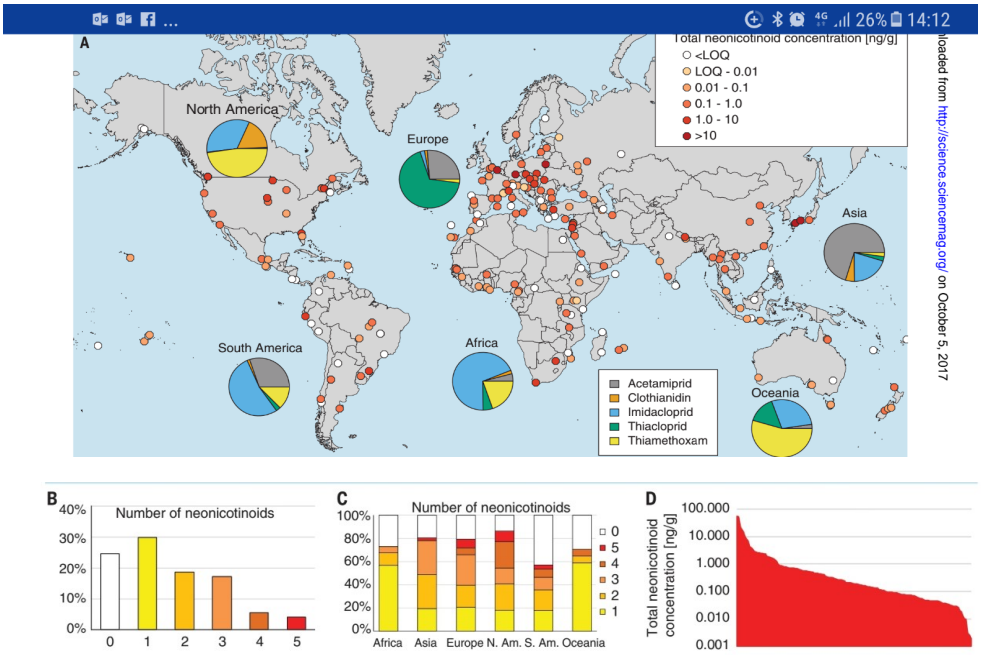

Fig. 1. Worldwide contamination of honey by neonicotinoids. (A) Worldwide distribution of honey contamination by neonicotinoids. White symbols, concentration below quantification levels (<LOQ) for all tested neonicotinoids; colored symbols, >LOQ for at least one neonicotinoid; shading indicates the total neonicotinoid concentration (nanograms per gram). Pie chart insets: Relative proportion of overall concentration of each neonicotinoid by continent (legend in bottom inset). (B) Overall percentage of samples with quantifiable amounts of 0, 1, or a cocktail of 2, 3, 4, or 5 individual neonicotinoids. (C) Proportion of samples with 0, 1, 2, 3, 4, and 5 individual neonicotinoids in each continent. (D) Rank-concentration

distribution of total neonicotinoids in all of the 149 samples in which quantifiable amounts of neonicotinoids were measured.

RESEARCH | REPORT
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sensitivity to neonicotinoids after frequent or long-term exposure (27, 32). Defining the thresholds below which neonicotinoids would not even have a sub lethal effect under chronic exposure is much more difficult than assessing levels corresponding to short term acute toxicity. Therefore, the proportion of samples that may affect bees cannot be ascertained based on current knowledge, but this study shows that pollinators are globally exposed to neonicotinoids, partly at concentrations shown to be harmful to bees. The fact that 45% of our samples showed multiple contaminations is worrying and indicates that bee populations throughout the world are exposed to a cocktail of neonicotinoids. The effects of exposure to multiple pesticides, which have only recently started to be explored (35), are suspected to be stronger than the sum of individual effects (18). This worldwide description of the situation should be useful for decision-makers to reconsider the risks and benefits of using neonicotinoids and provides scientists an inventory of the most frequent combinations of neonicotinoids found in honey (tableS9).We urge national agriculture authorities to make the quantities of neonicotinoids and other pesticides used on their territories publicly available and also professionally available to epidemiologists at a much higher geographical resolution to enable correlative studies between local events and pesticide load.

Last Meetings Notes

Sunday 17/9/17 club meeting at Dan & Chrystal's farm at Bushland Beach

Secretary - Bronwyn Jarret

1/ Graham smith sadly passed away on the 12th September and the funeral was attended by club members.

2/ minutes of the last meeting were in the club magazine for all to read, these minutes were accepted as being correct by Jon Mckinstry & seconded by Bronwyn Jarret

3/ Treasury – club is quite financial – The AGM will have all financials published for viewing as per club rules. These have been submitted to the clubs accountant for checking

4/ Club Shop - We have a had a lot of stock in the shop sold over the past month, and we have had to order In a lot of new stock, timber ware, Apithor traps, bottles, smokers, jackets

5/ With the **October meeting**, this will be the clubs **AGM**. As per every year we will require some more members to join the committee to help the club to plan and have a successful year in 2018
*Nomination forms will be sent out via email or can nominate on the day
next meeting is 22/OCT at Hermit park state school @ 2pm
*After the AGM we want members to give the new committee ideas on what workshops they want.
Ideas / club purchases and what else we can do at these meetings to improve
* next year Future meetings need places to visit & to hold meetings. 10 meetings /year

6/ Newsletter Our temp editor Shazza is always looking for newsy articles and photos send these to the editors email address. The newsletter is a great source of information and helps spread information to all club members what is happening in the way of Bees.

7/ Club shop is opening 1 Saturday morning a month to assist members to purchase stock.

Will be the Saturday week before the club meets, an email will go out to confirm time and date
Payment –cash, phone banking when on site or internet banking before pick up.
Does anyone wish the club to hold any other item?

8/ Jon & Frana gave a presentation to 75 year 2 students at HPSS. The children had a lot of questions from their eager young minds

9/ bio security – If interested members would like to tag along on hive checks notify Carla .
These could be short notice if you are willing to help.
Brood checks & sugar shake check please keep doing these when opening your hives
And forward the results to bio security.
Register your hives – free to do so & makes things easier when we do get problems.
Possible future training of AFB identification in hives will be looked at

General business

AFB – We have had hives confirmed with AFB in our club boundaries. This is not a local problem, it is a national problem. Bio Security (DAF) - current Budget in Townsville is to fight the varroa mite only. If the budget is seen to be used for other purposes that is not listed in their terms of agreement, it could be shut down and employees disciplined.
All samples from hives that are given to DAF are sent urgent for testing to Brisbane. The beekeeper has 7 days to shut down the infected hive/s.
Same day AFB test kits will be available thru the club shop. These test kits are for initial test while your sample is sent away by Bio security for analyse.

The club has purchased 2 x sheets of aluminium mesh which is being cut up into base board sizes.
Jon is also making up base boards with this fitted which can be purchased via the shop. The idea is for SHB small hive beetle if entering the hive, the guard bees will chase them thru the mesh and back out of the hive.

The club will be doing another round of club shirts shortly, as we have minimal left of last year's purchase and we have a lot of new members as well.

Meeting closed

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B	E	E	B	Y	A	L	Q	F	H
F	S	C	N	E	E	U	Q	I	F
W	L	L	F	N	N	T	V	L	E
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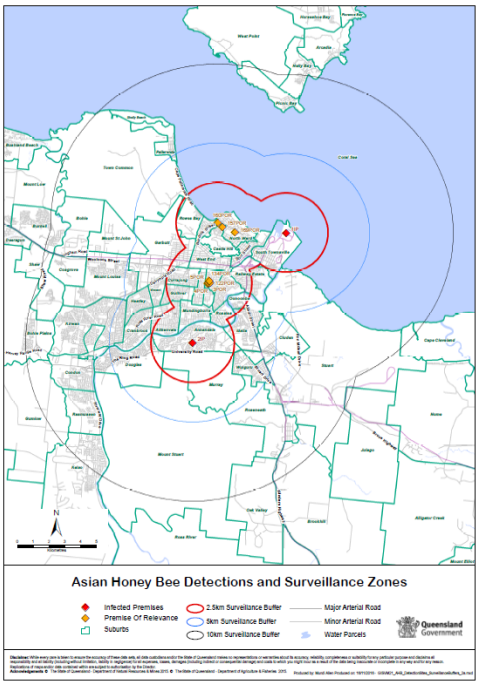
T	P	A	W	H	T	W	H	R	I
V	A	R	R	O	A	W	X	R	N
U	S	T	O	X	E	F	B	T	G
M	K	L	D	O	O	R	B	K	S
J	R	I	G	F	L	O	W	E	R
R	O	T	A	N	I	L	L	O	P
Q	W	O	R	K	E	R	C	H	D

Find -A-Word

Bee	Efb
Brood	Wings
Pollinator	Trap
Flower	Worker
Wax	Queen
Hivetool	Afb
Varroa	Honey

Messages from Biosecurity Qld

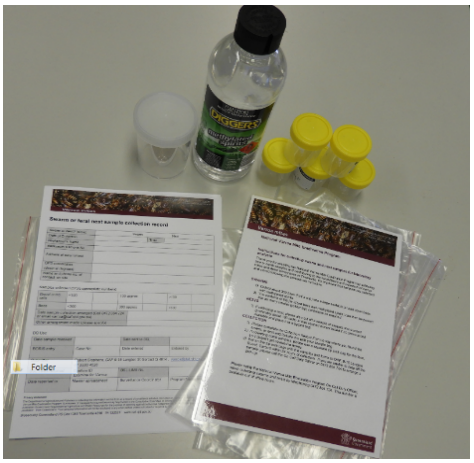
Swarm Season – Sampling



With the onset of summer temperatures, swarm season is well and truly upon us once again, so Biosecurity Queensland and the National Varroa Mite Eradication Program are urging local beekeepers to be mindful of risks associated with moving feral colonies of bees in relation to the potential spread of Asian Honeybees and Varroa mite. Most beekeepers can tell the difference between the two species but whenever in doubt **report to BQ immediately by calling 13 25 23**

BQ is also interested in obtaining a sample from colonies of swarming European Honeybees originating from high risk areas where Asian Honeybees have been discovered. We are particularly keen on areas within 2-5km (inside red buffer on map). ID cards and sample bees will be available at the next meeting.

To help facilitate this sampling, BQ will also be giving out kits at the next meeting (or by request) to beekeepers who expect to be collecting swarms over the coming months. The sampling technique is very simple, however staff from the National Varroa Mite Eradication Program are only ever a phone call away should help be required.



Beekeepers should also be aware of other potential disease risks associated with the collection of swarms including the spread of American Foulbrood (AFB). Where possible beekeepers should try and have barrier systems in place in order to isolate potential risk. Further information available from BQ

Brood Inspections

Due to the unfortunate news of several American Foulbrood (AFB) positives from around the region, many beekeepers have sprung into action and begun testing their own hives. Many people have even jumped on the southern state schemes of making October AFB awareness and inspection month. This is the perfect opportunity also conduct your Varroa testing at the same time while your frames are out and your glasses are on!

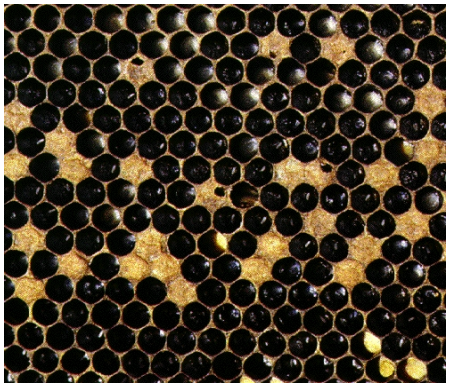
As most people are aware the National Varroa Mite Eradication Program is seeking the assistance of local Townsville beekeepers to regularly test the status of their own hives for the presence of Varroa mite. This testing needs to be conducted in the brood chamber and can be done via one of three separate testing methods:

- Alcohol Wash
- Sugar Shake (Kit pictured below)
- Drone uncapping

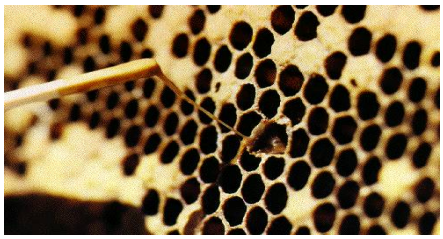
As seen above, President of the Townsville and District Bee Club Alan Ziegenfusz along with many other local beekeepers have been contributing to the program regularly and testing their hives every 8-12 weeks with the assistance of Carla from the Varroa team. If anyone would like to know more about these testing methods, we have Carla available to come and demonstrate the different testing methods. We will also provide a kit for follow up testing should you feel comfortable in performing the testing unassisted. All results (including negative) should be regularly reported to Varroa@daf.qld.gov.au. The NVMEP has now gone over 15 months without a mite

detection and is creeping towards one full year since the last detection of Asian honeybees on Remembrance Day. We are aiming to achieve what no other jurisdiction has before by eradicating the mites after they have gotten past a port of entry. If this does take place, the TDBAI has a lot to be proud of and we are very greatly for their support.

AFB



We also had Alan visit the program last month in order to view the NVMEP's testing and decontamination procedures in the wake of the unfortunate AFB results around the region. The Varroa program takes hygiene and decontamination very seriously along with the need for notification of suspect hives. BQ have been working closely with many beekeepers in creating awareness of the many disease issues affecting the industry and how they are best handled at a local level.
As always BQ is available to assist beekeepers in determining the presence of brood disorders such as AFB with our lab normally processing samples free of charge within 2-3 days upon receipt. All suspected cases of AFB are should be reported to BQ immediately with confidentially paramount. BQ will however pass on localities (suburbs) of confirmed cases to a nominated person within the club which currently is the president Alan.



All apiary related endemic disease issues are handled via Plant Biosecurity and Product Integrity staff and reports can be made via the call centre number on 13 25 23.

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A Quick Thank You

I would just like to say a great big thank you to all who have helped me put together the newsletters while Lyndsey has been away! I really have appreciated it!
Please do not worry if any of your hard work and effort has not yet been published, as there are more newsletters to come! I hope you have all gotten a giggle and also some important information out of them. Enjoy the next few, as I count the days I welcome Mr. Trott back in the new year, ha ha! Thank you all again, Shaz!

Townsville & District
BEEKEEPERS
ASSOCIATION

ANNUAL GENERAL MEETING 2017
NOMINATION FORM
OFFICE BEARERS / MANAGEMENT COMMITTEE

I, ...of.....

Being a member of the above named Association hereby nominate

.....of..... .....

To be.....(position) for Townsville & District Beekeepers Association Inc during the year 2017 / 2018

Nominated by: .....
(Signature)
Seconded by: .....
(Signature)
Dated: .....

Note: Form to be returned to TDBA Secretary before AGM

Cut along dotted line

TOWNSVILLE & DISTRICT BEEKEEPERS ASSOCIATION
ANNUAL GENERAL MEETING 2017
PROXY FORM

I, ...of.....

Being a member of the Association, appoint..... .....

Of ....

As my proxy to vote for me on my behalf at the Annual General Meeting of the above named Association to be held on 22 October 2017, and at any adjournment thereof

Signed this.....day of 2016

.....
(Signature)

This form is to be used: - In favour of the resolution ./ - Against the resolution