The Waggle

Autumn Edition 2023

Newsletter of the Gold Coast Regional Beekeepers

Furthering knowledge in Beekeeping by assisted learning and practical experience

What's inside

Gold Coast Regional Beekeepers

The Gold Coast Regional Beekeepers (GCRB) meets on the **third Saturday** of every month, at the Veterans Support Group Men's Shed, 18 Leagues Club Drive, Nerang. Meetings start at **8:30 am**.

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Editors Notes

Hey there! Have you noticed I have managed to "waggle" my blurb to the beginning of this newsletter. Well, almost the beginning. Once again there is a plethora of information inside this edition of the Waggle which will provide great reading.

I have added a new item inside - **Did You Know** I will be putting some interesting facts on a number of pages. If you didn't know before you read it you now become a "did know" after reading it and I am sure you will feel so much better!!!!

It would be **really really really** good if submissions from members started to arrive. I get the odd one but we need more. This can be anything bee relevant i.e. what's happening in and around your hives. Photos of your apiary etc etc.

Submissions for the Winter 2023 edition – please have to me NLT the 24th of May. Prefer you use the dhewett5865@gmail.com address. Members, we need your submissions.

Cheers for now

Don H

Vice Presidents Report

I'm standing in for our President, Michelle, whose family have suffered a bereavement with the loss of her mother in law. Our hearts and special prayers go to Michelle and her family at this difficult time.
This report touches some of the happenings and special events that have occurred since the last Waggle and gives some insight into what's coming. If I have missed something, I apologise.
Our club now has 105 members, with a regular turn out of about 35 at our club days.
A huge thankyou to our outgoing President Greg Foster for his commitment and hard work, reflected by the numbers above, we look forward to seeing Greg floating around.
While we're at it, I would like to thank everyone who turns up a little early to help set up and those that hang back at the hives to pack the equipment away.
Congratulations also to Fiona Fernie who has been elected to the committee of the Amateur Beekeepers Association. She will be a valuable addition to their committee.
Since the last Waggle we have;

- Held a honey competition (don't mention this to Greg, he claims that his honey was robbed)
- Held a stall at the Bunnings Nerang Christmas Family Evening
- Invited the cameras of Channel 9 into a beehive to make a short clip for a news report
- Witnessed how to do a Sugar Shake Test and Alcohol Wash conducted by our guest speaker Qld Biosecurity Officer Dr David Schlipalius

Things to look out for, keep on your radar:

- Paving of the area around the hives
- Bunnings Family night/s
- More guest speakers and demonstrations from experienced beekeepers

We are always looking for ways to improve our club, so if you have any ideas or comments, take a moment to jot them down and use the suggestion box available at our meetings.
Enjoy your bees, make them as comfortable as you can, they work hard.
Regards,
Arthur

New Members

Below are our new members since December 2022.

Ryleigh Kannar, Nick Ewart, John Carter, Tony Scroope, Julie McCombe, Tracey Bruhn, Sam Branjerdporn and Debbie Hodges.

Please make all new members welcome.

Club Biosecurity

What you can bring to meetings and What you can't

As the current COVID pandemic started to impact on our lives, the Club also realised that the biosecurity risks to the Club's hives also need addressing. After much discussion way back in 2020 the following biosecurity rules were implemented to keep both beekeepers and bees safe:

Veils/Bee suits - While the club does have a number of veils available for members and guests it was decided that personal veils or bee suits posed a low risk to activities. Members and guests can wear their own veil/bee suit while attending the Club Hives.

Gloves – This is a two-part issue with the bottom line being that only Club supplied gloves are to be worn. The first part is to prevent the spread of COVID. Latex inner gloves are to be worn by all members and guests who intend to put on bee-resistant outer gloves, which are the second part. The Club outer gloves are to be worn to protect both your bees and the Club bees from the transfer of pathogens between apiaries.

Hive Tools – Only Club hive tools are to be used within the Club apiary. This, again, is to prevent the transmission of pathogens between apiaries.

So, the bottom line is please bring along your veil/bee suit for use at the meetings but please leave everything else at home. This way both your bees and the Club bees have one thing less to worry about.

We Were on the Television

Channel 9 visited the Club to talk to us about the increased interest in beekeeping because of the figures below which were released by DAF Qld recently. You can view the segment via the link below

https://twitter.com/9NewsGoldCoast/status/1620327835318603776?s=20&t=5QIF2mimK64UbSzmbmPLRw

Year	Total Number Registered Beekeepers	Total Number Registered Beekeeper Hives
2016	107	231
2017	283	1934
2018	402	2823
2019	435	2964
2020	566	5423
2021	691	5907
2022	753	6142

[1]

Table 1 Total numbers of registered beekeepers and hives in the Gold Coast City Local Government Area from July 2016 to Dec 2022

[1] Did You Know: Only the oldest bees in the colony carry out foraging duties. They are 35 to 45 days old.

Beekeeping Tasks for Winter

From the editor - In previous editions I have included beekeeping tasks for the particular season the relevant Waggle was published. This is not very clever as the relevant season is upon us and preparation should have been done earlier. So I have decided to add Beekeeping Tasks for the following season so you can prepare in advance.

https://www.ecrotek.com.au/blogs/articles/beekeeping-in-winter-climate

a. Keeping your bees cosy in cold weather:

Winter is a natural rest time for bees. After building up their honey stores through spring and summer, they're ready to hole up in the hive and stay out of the cold and rain.

Winter can be a rest time for beekeepers too. If you weatherproof your hives, make sure they're in a good position and feed your bees extra if needed, you should be able to get them through with minimal hive checks. Although winter is well underway now, it's not too late to sort out your hives and help them thrive.

Although some parts of Australia are lucky enough to have mild, dry winters, other areas experience very low temperatures, high winds, storms, flooding, frosts, and snow. Your level of weatherproofing depends on where you live – although it's always good to keep an eye on the forecast in case your region gets an unexpected cold snap or winter storm.

Here's how to care for your bee hives through the winter – wherever you are:

b. Protect your bees against the elements:

Like us, bees prefer to be warm and dry during winter. Weatherproofing your hives can help protect them from cold temperatures, wind, and heavy rain.

Keep your hives cosy by adding solid bottom boards, if you don't already have them. Reduce hive entrances to minimise the amount of cold wind entering the hive – without preventing your bees from getting in and out. If you live in a particularly chilly area, consider using a hive cover as well – this is a plastic, padded tube that slips over your hive to add another layer of protection against wind and cold.

For wind and storms, weigh down the hive lid with bricks or stones and add slanted boards to protect hive entrances and ventilation holes.

Speaking of ventilation – it's an important consideration too. You want your hive to be warm, but not damp and stuffy, as this can lead to mildew and disease. If you think your bees aren't getting enough fresh air, add a couple of small ventilation holes near the top of the hive, on the vertical lip of your lid to avoid any rain getting into the hive.

c. Packing down for winter:

Bees use a lot of energy to heat and clean the hive, so packing hives down for winter by reducing their physical size can make it easier for them to maintain warmth through winter. This means removing empty frames and boxes and reducing the number of hive entrances. You can also rearrange the inside of the hive to maximise efficiency. In autumn, you should have left enough honey stores in your hives to get them through winter. Position these honey-laden frames at either end of your brood box, with brood frames clustered together in the middle.

Although it's more complicated, you could also think about combining a smaller, weaker colony with a stronger one to increase its chances of getting through the winter.

d. Feeding bees in Winter:

When you harvest your honey towards the end of autumn (or summer if you live in a

particularly cold area!), you need to leave enough to keep your bees fed through the winter. In Australia, an average colony needs around 8 frames – or roughly 18kgs of honey to keep it going. Of course, this depends on where you live – in colder areas, more frames may be needed.

If your bees don't have enough honey in storage, or if their honey stores shrink more quickly than you expect, you may need to supplement their food to help them survive. Depending on your preferences and systems, this could mean using honey reserved from a previous season, or feeding with sugar water. Don't feed with pollen supplements at this stage – pollen can trigger a population increase, which could mean you need to supplement with even more feed.

e. Check and change:

Although you should minimise hive checks during winter, you shouldn't ignore your bees altogether – even if getting outside isn't that appealing.

Check your hives at least once a month during winter, preferably on a warm, dry day. Lift the lid briefly to check food stores, look for dampness or mildew, assess hive health, and sweep dead bees, twigs, or leaves from entrances. If you notice that food supplies are low or see signs of disease, or a queenless hive, you will be able to supplement or treat before it's too late.

Towards the end of winter, watch for bees leaving and re-entering the hive – they should start collecting pollen early as they gear up for spring. If you're concerned about the low level of activity, supplement with pollen to help them start the season on a strong footing.

f. Get ready for SPRING!

The best way to use your spare time in Winter is to prepare for the busiest time of year for bees and beekeepers - Spring! Identify any boxes, lids, bottom boards, queen excluders or other equipment that might need to be replaced when the weather warms up. Coming into spring, as long as it is warm enough, you will also then make room in the brood box for more brood by extracting the honey in your brood box that kept the bees warm through winter…

It's all about being prepared:

If you keep a good eye on your hives, make sure they're weatherproofed, properly positioned and well-fed, your bees should make it through the winter without much trouble. As with almost anything with beekeeping, it's all about being aware, and being prepared.

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[2] Did You Know: 1kg of honey takes up to 145,00km of flying to produce

Bee Books

The following books are good for general bee information and standard (Langstroth) hives. They do also cover off on Warre hives and Top Bar hives:

- **Backyard Bees** – A guide for the beginner beekeeper by Doug Purdie (ISBN 978-1-743-36508-3)
- **The Bee book** – Beekeeping in Australia by Peter Warhurst & Roger Goebel (ISBN 978-0-734-50330-X)
- **The Bee – A natural history** by Noah Wilson-Rich (ISBN 978-1-78240-596-2).
- **Beekeeping for Dummies** by Howland Blackiston (ISBN 978-1-119-31006-8)

The following is mainly to do with Top Bar hives:

- **The Barefoot Beekeeper** by Phillip Chandler (ISBN 978-1-326-19225-9)

For Slovenian (or A-Z) hives this book is about the only one out there:

- **A-Z Beekeeping with the Slovenian Hive** by Janko Bozic (ISBN 978-1-545-50916-6)

If you are interested in Native bees then these books are very informative:

- **The Australian Native Bee Book** by Tim Heard (ISBN 978-0-646-93997-1)
- **A Guide to Native Bees of Australia** by Terry Houston (ISBN: 978-1-4863-0406-6)

Another handy book regarding the flora to be found that will support your bees is:

- **Honey Flora of Queensland** by S T Blake and C Roff (ISBN 0-7242-2371-1)

Queen Marking Colours

Internationally recognised colours are used to mark the queen and keep a record of her age. A marked queen is easier to spot.

Queen Marking Colours		
Year Ending	Colour	
Year Ends in 1 or 6 (eg, 2021)		White
Year Ends in 2 or 7 (eg, 2022)		Yellow
Year Ends in 3 or 8 (eg, 2023)		Red
Year Ends in 4 or 9 (eg, 2024)		Green
Year Ends in 5 or 0 (eg, 2025)		Blue

Before you rush out and buy every colour, consider this: If you use one particular colour and keep accurate records you can use the same colour every year. Referring to your notes will tell you the age of your queen, where you obtained your queen and anything else you consider relevant..

An Interesting Read – Submitted by GCRB Member Tony Parker

I'm part way through reading a recently published book called The Insect Crisis: The Fall of the Tiny Empires that Run the World. It is a fascinating book and is a "devastating examination of how collapsing insect populations worldwide threaten everything from wild birds to the food on our plate". I thought I would bring it to the attention of Club members as it is such an interesting and arresting read.

There is a fascinating chapter titled The Labour of Honeybees which examines how apiarists, commercial and hobbyists, have utilised the industriousness of honey bees to create agricultural enterprises of unprecedented size, viz the almond/cherry/apple orchards of the USA and other countries (including Australia) by transporting 1000's of hives across the country to pollinate the orchards. In doing so, the apiarist's focus on Apis mellifera has been to the detriment of thousands of native wild bee strains to pollinate certain plants. In the US almond farmers are being encouraged to plant wildflowers in the featureless orchards of thousands of trees to for bees to forage on and vary their diet, but at the same time the orchardists (as opposed to the apiarist supplying the bees) worry about bees spending more time on flowers than pollinating the almonds – an interesting conflict of interest.

The chapter also looks at the importance of bumble bees, touches on Varroa destructor, American foulbrood, Nosema and colony collapse.

It is not a doom and gloom perspective but rather an encouragement for apiarists to take the big picture view and appreciate the honey bee for its fundamental value in general rather than just their usefulness to us for pollinating vast orchards and giving honey.

Barrier Systems

What is a barrier system?

Barrier systems separate single hives, groups of hives or entire apiaries into separate, distinct units. Once the units have been defined, interchange of bees, honey and hive components between the units is prevented. Beekeeping equipment must be thoroughly cleaned or sterilised between uses in each unit.

Barrier systems were developed as a method of limiting the spread of American foulbrood between hives and apiaries. While they are very effective at reducing the spread of AFB and other diseases, they should never be considered a replacement for regular brood inspections. Barrier systems do not prevent outbreaks of AFB and so brood inspections are still required. Barrier systems do, however, make management of AFB much more efficient.

RECOMMENDATION

13.1 A beekeeper should maintain a barrier system that divides the apiary into one or more clearly identified, isolated subunits and movement of hives, components and appliances between these sub-units should be strictly controlled.

13.2 The barrier system should include the following elements:

(a) Clear, permanent marking and identification of hives, components and appliances within each sub-unit.

(b) Procedures (including appropriate controls), to prevent non-permitted interchange of hives, components and appliances between sub-units

(c) Training and instructions for all employees.

(d) Documentation to enable the tracing and identification of hive components, honey and honeycomb to identifiable sub-units.

(e) Procedures to ensure captured bee swarms and acquired used items including hives and appliances are not introduced to the apiary until after appropriate inspection and testing for diseases or sterilisation.

Types of barrier systems

1. Individual hive barrier system
   The most effective barrier systems are individual hive barrier systems. **In these systems, frames from a particular hive are always returned to the same hive.** As a result, supers and combs are kept in single, non-interchangeable units. While this is very effective in limiting the spread of diseases such as AFB between hives, **it is also the most logistically difficult and may not be feasible for very large beekeeping operations.** However, commercial beekeepers with mobile extracting plants will be able to extract honey at the apiary site and so returning the extracted frames and boxes to the same hives will be much more practical.
2. Apiary barrier system
   In this system, the beekeeper defines each group of hives within their operation as an apiary and then each apiary becomes a separate entity. **Materials are then only interchanged within each apiary and not between them.** These systems are more practical for large-scale beekeepers. They give beekeepers confidence that if a disease such as AFB is found in one hive, it will not have spread beyond that hive's apiary group.
3. Extended apiary barrier systems
   Some beekeepers may wish to define the barriers within their operation so that two or more apiaries are included in each group. In this case material may be interchanged within the apiaries in each group, but not between each group. While this may be easier logistically, the effectiveness is much reduced as many more hives are exposed to potentially infected transferred material.

There are many different variations of the above systems. The information below provides some details of different barrier systems and case studies of where they have been successfully implemented. It's up to each beekeeper to decide which barrier system works best for their operation.

The benefits of implementing a barrier system

As mentioned, barrier systems were developed in large part as a management strategy for AFB. The major benefit of implementing a barrier system is limiting the spread of this disease, which is the most serious honey bee disease currently present in Australia. In particular, the barrier will allow for limiting the spread of the disease while it is in the early stages. Early AFB infections may be difficult to detect but infected hives will still be able to spread the disease. If a barrier system is in place, beekeepers can be confident that even an AFB outbreak that they have not yet detected will not be able to spread beyond the unit in which it has occurred.

More information:

Honeybee Disease Barrier Management Systems (Rural Industries Research and Development Corporation)

The barrier management system – a best practice video from the Honey Bee and Pollination Program

American foulbrood – barrier systems (NSW Department of Primary Industries)

Download the Code

http://beeaware.org.au/wp-content/uploads/2017/09/Australian-Honey-Bee-Industry-Biosecurity-Code-of-Practice.pdf

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Thermo Insulated Bee Boxes

The Thermo hives include several accessories as standard including queen excluder, Varroa drawer, Varroa trap bottom board, pollen trap, multifunction hive entrance, top feeder and lock **Thermo Insulated Bee Boxes**

Loyal club member, Angela Yong, is the Australian distributor of the new thermo insulated bee hives. These innovative hives are manufactured from food grade plastic in accordance with the Food Codex, and feature an all round double layer of insulation to keep the bees cooler in the summer and warmer in the winter. The injection moulded hives are directly coloured so that they do not need to be painted.

Doubled walled structure with insulation and latch handles

The top cover features an innovative feeder board where bees can be fed solids or liquids, or both without disturbing the bees or opening the hive. These top covers have been designed so that they can also be used on standard hives made from timber.

The full specifications of the Thermo hive and what it entails is available at this link: Thermo Hive Specifications

Angela is offering to donate 10% of all sales of the Thermo hive to GCRB club members to the club. For more details please contact Angela direct at angeyong@hotmail.com or on 0412 843 209

[3] A worker bee can visit up to 2,000 flowers a day

Beehive Boxes - Drew Maywald February 2023

When I first started my beekeeping journey, I was offered all sorts of advice about everything and anything to do with beekeeping. To make it more confusing everyone I spoke to had a different idea and each one was the best thing since sliced bread. Strangely enough every suggestion worked and was the 'only way' to do it!

The same came when I asked different beekeepers how to build their hive boxes. The various ideas included things like don't use glue, no need to pre-drill screw holes, make the box and then paint it, paint the whole box and then put it together, undercoat all the joins to make them waterproof before assembling the box, paint the joins to seal them before assembling the box, and so on.

To step away from all the confusing ideas, I decided it would be best if I were to ask four carpenters and cabinet makers from the Veterans Support Group Men's Shed in Nerang, what they would do if they were going to make a beehive box, and I thought you might be interested in what they recommended.

Interestingly, the four carpenters and cabinet makers I asked were unanimous in what to do. Assemble the box before painting it, by glueing and screwing (with pre drilled screw holes and using galvanised screws), and then paint it with one or two coats of undercoat and at least two finish coats, preferably using mineral based turps on the outside to increase the life of the box.

But, (there is always a but) they all said you must only use one glue, and that glue is called **Titebond III Ultimate**. This amazing product, if used liberally on each joint, will not only stick the timber sides and ends together but it will provide a waterproof (not water resistant) seal designed for outdoor use.

So I thought I would do a test to see if my 4 expert advisers were correct, by sticking a couple pieces of timber together with Titebond using no screws, clamping them and leaving them for 12 hours (I was advised 4 hours is enough time for the glue to set).

Next day I thought I would lever the two pieces of timber apart. Well I tried to lever them apart, but what actually happened is that they would not come apart without using a hammer and chisel and even then both pieces of timber were destroyed!

This was good enough proof for me and now every time I make a bee box, whether it be for honey bees or native bees, I use Titebond III on all the joins. All the joins are sealed and waterproof and will probably last longer than the timber itself, and it's only after the box has been sanded do I paint it using two coats of undercoat and two finish coats. For a honey bee box I paint both the outside and inside of the box, while for a native bee hive I only paint the outside and the surfaces where boxes come into contact with each other.

Titebond III adheres so strongly that I don't use any screws when I am making a native bee box.

Titebond III comes in a 3.7 litre container or a 473 millilitre squeeze bottle, and if stored with the lid firmly closed, lasts for ages. Titebond III is not available from your local hardware store regardless of how big it is. Here on the Gold Coast, I found that the best place to buy this amazing glue is from Gary Pye in Currumbin. Gary operates from a shed off Traders Way Currumbin and can be reached on 5525 7561. Alternatively, you can find your own supplier by asking Mr Google.

Forget everything you have done in the past about making bee boxes and try using Titebond III before you paint. Believe me you won't be disappointed. As they say "You never, never know unless you give it a go!" Least I think that is what they say.

From the Bee Shed - submitted by Steve "Windy" Hill

Hi all. It has been a few months since I last updated you on the going-ons of my Slovenian hives. As of September 2022 I now have all six hives up and running. Of the six, I still have one that only has the brood section open, the remaining five are going gangbusters with both strong brood and a decent monthly rob of between 2 and 4 frames.

I have to admit it has not been all smooth sailing. The queens in two of the hives managed to sneak up into the super area and lay awesome brood, but it meant I had to pull the entire hive apart to find the queen, repair the excluder, put the queen back in her place and rebuild the hive. The effort has definitely been worth it as both hives are producing great honey.

The little two frame extractor I bought way back finally died as the cogs managed to strip out. Luckily, I had a four frame spinner on hand in preparation to go into the new beehouse (when I built it). Extracting the last batch of honey was so much quicker with the four frame spinner, and I wonder why I didn't get it up and running earlier. Only problem is how much more room it takes up in my little shed.

The weather earlier in February had the girls hanging around outside but not as many as I thought I would see. I am not sure whether this was due to being able to open up the vent flaps in the back of the hives and let a greater airflow, or having the bee shed sited under a large fig tree which provided constant shade. Either way the hives seemed to remain cool during the period.

I will be looking to hold a couple of open days in Apr/May so that any new beekeepers who would like to look at Slovenian hives can do so. In the past, the sessions have gone for a couple of hours on a Saturday morning and those attending quite enjoyed the morning. If anyone is interested, please catch up with me at the next meeting.

Yours Aye

Steve 'Windy' Hill

Small Hive Beetle Traps – submitted by Drew Maywald

The small hive beetle SHB is a beekeeping pest. Endemic to sub-Saharan Africa, the small hive beetle, *Aethina tumida* was first discovered in the United States in 1996 and has now spread to the Australian East Coast following its discovery in New South Wales in 2002.

The adult beetle is dark brown to black and about 3 – 5 mm in length. The adults may live up to 6 months and can be observed almost anywhere in a hive, although they are most often found on the rear portion of the bottom board of a hive. Female beetles lay irregular masses of eggs in cracks or crevices in a hive. The eggs hatch in 2–3 days into white-coloured larvae that will grow to 5 mm in length.

Larvae feed on Pollen and Honey , damaging combs, and require about 10–16 days to mature. Larvae that are ready to pupate leave the hive and burrow into soil near the hive. The pupation period may last approximately 3–4 weeks. Newly emerged adults seek out hives and females generally mate and begin egg laying about a week after emergence. Hive beetles may have 4–5 generations a year during the warmer seasons.

Larvae tunnel through comb with stored honey or pollen, damaging or destroying cappings and comb. Larvae defecate in honey and the honey becomes discoloured from the faeces. Activity of the larvae causes fermentation and a frothiness in the honey, and the honey develops a characteristic odour of decaying oranges.

Damage and fermentation cause honey to run out of combs, creating a mess in hives or extracting rooms and on the front of a hive. Heavy infestations cause bees to abscond; some beekeepers have reported the rapid collapse of even strong colonies. This is commonly called a slime out and the foul smelling honey will run out of the hive entrance

The beetle is most often found in weak or failing hives and rarely affects strong hives.

During the warmer months when SHB are most active they can destroy and slime out a hive in two weeks.

The best defence against SHB are strong healthy colonies coupled with minimal empty frames in the hive. However, you would be well advised to install traps and controls in your hives to minimise SHB infections. Here are two methods that you can use effectively in your hives which we have discussed and workshopped at previous GCRB meetings.

Non Chemical Trap

A simple way to catch SHB without the use of chemicals is to put a chux in your bottom tray or on a specially made frame that sits on top of the super. This frame has 3 mm wire mesh attached to it, as illustrated on the left. While SHB can pass through this mesh, the holes are too small to allow bees to do so. However, if you have difficulty getting 3 mm mesh, I have successfully used 5 mm rodent mesh available from most hardware stores

In the bottom tray I stick the corners of the chux down with double sided sticky tape which works a treat.

When pursued by the bees the SHB tries to escape down to the bottom tray, or up through the mesh on the frame above the super. However, the hive beetle cannot walk backwards and has small spurs on the ends of their legs, as shown in the photo on the right. When the SHB try to escape, the spurs get caught in the chux and they cannot get away, and will die.

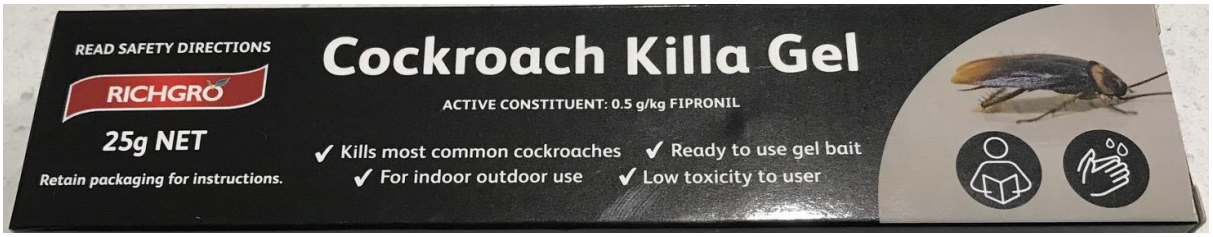
Chemical Traps

You can buy Apithor traps from most beekeeping suppliers. These traps are very effective and sit on top of the frames in your super or brood boxes. Each Apithor trap has a number of 3 mm openings at each end. Bees will chase the SHb into the trap where they come into contact with the lethal poison Fipronil. An alternative to buying Apithor traps, is to make your own chemical traps using the active ingredient fipronil.

Fipronil Is a **poison** that will not only kill Small Hive Beetles, but will also kill your **bees** if they come into contact with it, so **do not** use Fipronil in your hives in a liquid form, or where your bees may come into contact with it. Always use Fipronil in your hives as a **gel** and in places or containers where it is not possible for your bees to come into contact with it.

Fipronil gel is available at your beekeeping supply store or online, as TopBait Plus for around $30 for 35g which comes in a handy easy to use dispenser.

However, Bunnings also sells Fipronil in a similar 25g dispenser, as Cockroach Killa Gel for around $9.00.



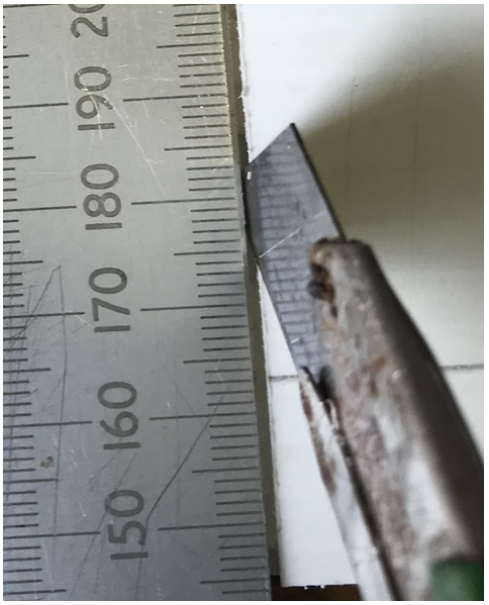
The active ingredient in both products is 0.5g/kg Fipronil. I compared the safety data sheets for both products and they both list the ingredients as:

- 0.5g/kg Fipronil, and
- Other non-hazardous food ingredients - secret.

To make your own Fipronil SHB beetle traps you will need the following:

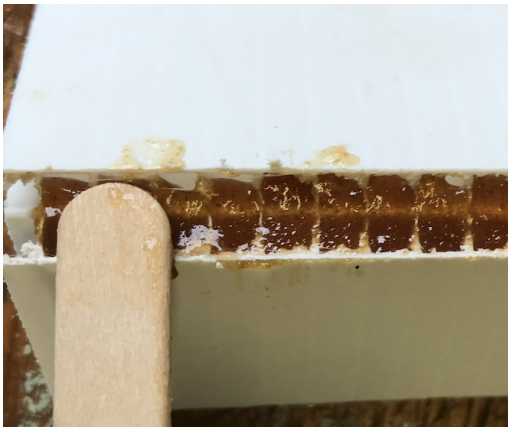
- Disposable rubber gloves
- 3.5mm corflute cut into 60 mm squares. The colour of the corflute doesn't matter and I use a corflute that has previously been used as a sign so I do not have to buy it.
- Stanley knife.
- 50 mm wide tape. Cloth tape is ideal and is available from discount shops quite cheaply.
- A permanent marker pen.
- Fipronil gel.
- Paddle pop stick.

To make the trap the score the 60 mm corflute square across the line of holes using your stanley knife as illustrated below left.

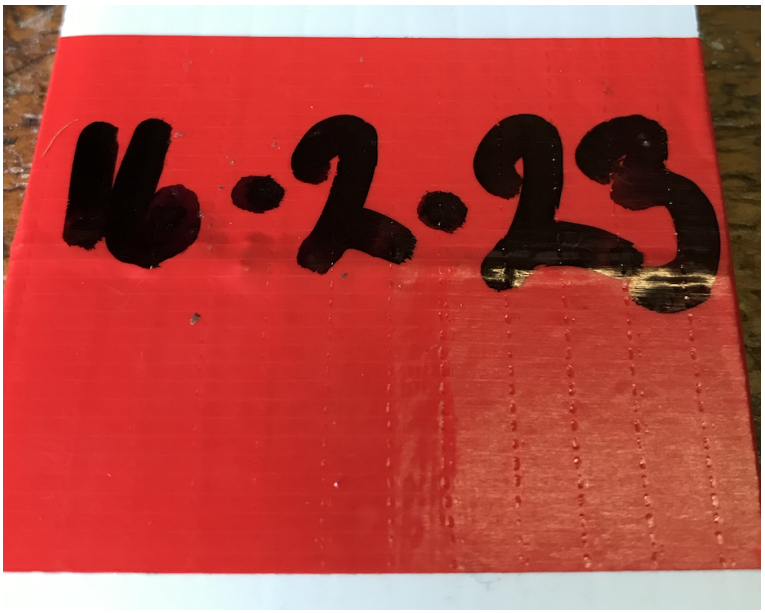


Bend the corflute in half across the score line as illustrated above right.

Put on the disposable rubber gloves and, using the Fipronil dispenser, carefully run a bead of fipronil across the exposed holes as illustrated below left. Push it down into the holes using a paddle pop stick. You do not need to use a lot of Fipronil, simply a bead over the top of the corflute cells, as illustrated above right.



Straighten the corflute and securely wrap a layer of the 50mm tape around the corflute square so that the holes are not covered by the tape. Because Fipronil has a limited life span of around 3 months, write the date on top of the trap you have just made with the permanent marker pen, as illustrated below. I find I can get around 15 - 18 traps from one Fipronil dispenser.



Your trap is now complete and ready to be installed in your hive. The trap can be laid across the top of the frames, on the bottom of the hive, or in your SHB beetle tray under the hive. Do not hang them vertically between frames or on the side of your box as the temperature in the hive may cause the fipronil to liquify and leak out, which will be fatal for your bees.

I know of one beekeeper who gets great results controlling SHB by using Fipronil in the between frame beetle traps, like the one below, instead of Vegetable oil or diatomaceous earth.

In one of my updates I reported that a beekeeper in Brittany, France has had no problems with Varroa Mite since he put a copper wire across the entrance to his hives. I thought it would be worth a try so I bought a roll of 5mm wide x 10m long copper adhesive tape from Jaycar, which I put across the entrance to my hives. In mid February 2023 I inspected both my hives including the brood and counted a total of 6 hive beetles in both hives. I am going to monitor this closely as it may be a coincidence, but at this time last year I lost one hive to SHB. Another member who has done the same has also noticed a decline in SHB since putting the copper tape across the hive entrance.

Tips and Tricks to Calm an Aggressive Hive - submitted by Drew Maywald

At our January meeting forum the issue of aggressive bees was raised, so I thought it worth helping members who have or had problems with aggressive bees.

The fear of dealing with aggressive bees is very real particularly if you are new to beekeeping. Nobody wants to deal with a hive of aggressive bees particularly if they are a danger to you. Every hive is different and not all hives will react to the same calming techniques, so here are some tips to keep your bees calm.

Background

Before you learn how to deal with aggressive bees it is important to understand what makes them aggressive as there are a number of changes to their environment that can make them aggressive, including, but not limited to:

The hive has lost the queen. Losing a queen is a major blow to your hive which causes the bees to get confused, nervous, and become hostile. Typical signs that you have lost a queen are:

Lack of eggs and brood.

An increase in pollen and nectar with a lack of brood.

The bees can be listless and cranky, often making a high whining sound.

Diminishing population in the hive as the older bees die.

Workers laying eggs which is indicated by an increase in drone brood and more than one egg per cell.

A new queen can cause a change in the temperament of the hive. The queen determines the behaviour of the bees, so if you have re-queened and the new queen is more aggressive than the previous one, then all her offspring will inherit her aggressive traits.

A lack of nectar can cause your bees to become aggressive. When bees have a shortage of honey they can enter a fight or flight mindset which causes them to become aggressive and they may even rob other hives.

If the hive is too large, particularly at the end of summer, the bees may become more aggressive, but this is only a passing phase.

Poking around in the hive too much can also cause the bees to become aggressive. If you are checking on your bees daily, for example, this will make the bees quite aggressive as they just want to be left alone with minimal disruption.

Poor weather is one of the most common reasons why bees get aggressive. Bees like to work in calm sunny conditions, so if you are going into your hives when the weather is wet, cold, stormy or windy, they will become very aggressive.

[4]Predators. Fortunately, in Australia, we do not have bee predators like bears that will prey on the hive, but cane toads and water dragons have been known to prey on your bees.

Dealing with Aggressive Bees

Wear light colours. For some reason bees can be more aggressive if you wear dark clothing.

Work slowly and calmly. Bees can sense the emotions of their keepers. If you take on a demeanor of fear and concern, the bees will replicate that as well. Slow, gentle and deliberate movements will tell the bees that you mean them no harm. Sudden movements can startle a hive which can lead them to being aggressive.

Clumsy Beekeepers. When I started out as a beekeeper, I was very sloppy. I crushed bees unnecessarily by banging frames as I tried to take them out or replace them. The fear of bee stings made my movements jerky and unsteady. When a bee makes contact with its sting anywhere on your body, your arms start flailing, causing even more aggression among your honey bees. Handling bees is like dancing with a partner. If you're nervous, you're likely to hurt the other party, which causes them to get even right there on the dance floor.

Do not open your hives too often. Much like people, bees do not like to be prodded at or bothered. Often, they like to be left alone to do their work. If you open and close your hive frequently, like daily, you are constantly throwing your bees into a fight-or-flight mode. Be calm and deliberate when you decide to open your hive.

Watch the weather. Bees are hostile to bad weather. Even if it is not yet raining, bees can sense when rain will be on the way. Exposing them to that kind of climate will make the bees more antagonistic. I avoid working my bees on cold, windy or stormy days. It is much more pleasant to do your beekeeping work when it is nice and calm outside.

Use the smoker. The bee smoker is an invaluable tool for a beekeeper. Using it wisely and sparingly will help you as you learn how to deal with aggressive honey bees. Do not use it too often or use too much smoke, otherwise you might further frustrate the bee, and raise their aggression level. Light smoking rather than choking with smoke is preferable. A light puff of smoke in the hive entrance followed a couple of minutes later by a light puff when you crack the lid, and then waiting till they sound normal before opening the lid will work a treat.

If you get stung, scrape the sting out with your hive tool and then smoke the sting. This will mask the alarm pheromone and calm the bees. Aggression can often follow a sting as guard bees encourage other bees to sting.

It is believed that a light puff of smoke at the entrance sends a message to the bees that a bushfire is nearby and they start to fill up with honey in case the hive is in danger. Bees with full tummies of honey find it harder to sting people.

Know that this is temporary. It can be jarring to see your normally calm hive suddenly become aggressive. But you must keep in mind that this is only a temporary state. It should ease your mind to know that they will return to a calm disposition over time. I learnt very quickly that my bees were much more aggressive on windy days, but on calm sunny days I hardly have to use my smoker

Robbing. In times of scarcity, the bees can get mean. Sometimes scarcity is caused by a lack of nectar, and during these times bees can resort to robbing from other hives. Once robbing begins, everyone becomes an enemy, even you. They want absolutely nothing to do with you. This, in turn, could be one cause of aggression among your honey bees.

Winter is coming. When the weather starts to change, the bees are well aware that the season of plenty is coming to an end. They have a very valuable asset to protect, and they take that responsibility very seriously. The honey that they have could make the difference between life and death, so it's no surprise that they can get stinger happy!

[4] Did You Know: Bees belong to the insect order Hymenoptera, which first appeared 270 million years ago!!

Wash your bee suit. This is something you may not have considered, but every time you visit your bees some of the ladies will take their anger out on your suit. When they do, the sting site is laced with the alarm pheromone, so when you go back for your next visit, it's possible that the alarm pheromone is still detectable. So, even before you open up the hive, the guard bees are already on high alert, which is why it is a good Idea to wash your bee suit regularly. Don't worry about the stains, propolis, wax, and honey that creates a sticky mess on your suit, all you're trying to do is rid your suit of the alarm pheromone. That can be done with a good soak. Once the smell has been neutralised, it will be fit for duty once more.

Placement of your hive. Sometimes beekeepers place their hive(s) in locations that are convenient to them, without any consideration for the bees. If the hive is placed next to a path that enjoys a lot of traffic or is frequented by animals, the bees will be in a constant state of alert. Bees enjoy the quiet. They could also do without constant movement in front of the entrance of the hive. This is why we, as beekeepers, are advised to approach hives from the back rather than from the front.

How you smell. Bees will react very aggressively to strong smelling deodorants, perfume, aftershaves and the like, so don't wear them when you are going into your hives or you will attract a lot of unwanted attention. This was brought home to me last winter when I had a chest cold and put on some vapour rub. When I went out to the garden, the guard bees detected the strong eucalyptus smell and started to attack me from at least 5 metres from my hives.

When it comes to our temperaments, humans and bees share a great deal in common. We are both susceptible to agitation based on changes in the weather, changes in our homes, and sudden interruptions. When the environment changes, your little buzzers can act up a little bit, but they soon settle down, so there's no real need for alarm.

If you got your bees from a reputable source, genetics are unlikely to be too much of a worry for a year or two at least. By following the guidelines above, aggression in bees can be easily dealt with and is a minor hiccup in your beekeeping journey.

Hive Registration

If you keep bees on the Gold Coast you must be a member of a beekeeping club and be registered with Biosecurity Queensland, as a Biosecurity Entity. Once you are registered as a biosecurity entity you will be issued with a HIN (Hive Identification Number). Your HIN must be displayed on your hive. Registration as a biosecurity entity for beekeepers applies if you have one or more beehives. You must also be registered even if you don't own the land where you keep your bees, for example, if:

- you are a lessee
- your bees are agisted on someone else's land
- you keep beehives on someone else's land.

A person, persons or organisation can be registered as a biosecurity entity. You can register as a biosecurity entity online at this link: Biosecurity Registration Portal

Registration is free. This does not apply if you only keep native bee hives. If you already have a HIN number you will be registered as a Biosecurity Entity. If you want to check whether you are registered or not, click on the 'Registration Requirements' tab at the top of the screen at the link above.

My Bees - submitted by Don Hewett

I thought I would show you my apiary. Currently I have 5 hives with a mixture of Flow and conventional Langstroth arrangement. Two of these hives usually live at my daughter's place near Jimboomba. They had a poisoning episode which took a huge toll on the hives. Luckily the queen in both hives survived and there were sufficient bees, brood and food stores to allow them to rebuild. I intend to relocate them back to Jimboomba in the next few weeks.

Originally I had only 2 flow hives. I decided to venture into Langstroth to enable better hive management. Particularly when it came to frame swapping and replacement. It's easier to swap frames between brood and honey supers as required.

You can't put a standard frame into a flow super.. Well you can but it upsets bee space and don't open the rear inspection as you will get a face full of bees.

You might notice that my hives are not all orientated the same way. I haven't found this to be a problem as all hives get a lot of sun. The hives shaded by the frangi panni get full sun from midday onwards and during winter have sun most of the day when the tree loses all the leaves.

Honey harvest - it has been a lean year for harvesting. In the last 12 months we have harvested 3.0kg of honey. The langstroths are still immature as far as hives go and the Flow frames appear to have enough for the bees and not enough for me. I suspect the weather played a huge role in this. I also noted that there was very little flowering going on in the council reserve behind my house. If this is happening within their foraging radius, it explains the low production. We just have to bee patient!!!!