

THE POLLINATOR

March 2022

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2020/2021 Committee

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CONTRIBUTIONS NEEDED!

Contributions for the next issue are welcome

Do you have a favourite honey recipe? Share it with the rest of

A funny story about your bees? We'd love to hear it!

Read a good book recently? Why not write a review so we can tell everyone about it?

Photos of your bees? Make them famous and send it in to

Anything to sell? Or want to buy? List it with us!

WE'D LOVE TO HEAR FROM

Email to Robert

Your Club News

From the President

Hi everyone

It's been an unusual start to the season club wise, not having a face to face meeting till this year. The first meeting of the year was at the Taree Showgrounds on the 19th of January, I was looking forward to it so much but could not attend because I was flooded in at the last minute. The meeting went ahead and I heard that the main topic of conversation was small hive beetle. Nature seems

to be creating all sorts of challenges, both obstacles and opportunities.

In the meantime, the bees continue to do what bees do, and that is make honey to store and get them through the winter months.

Little do they know that the knowledgeable and crafty beekeeper will relieve them of any excess honey and make sure they have a nice clean safe disease-free home to live in.

The rain we are having is great but perhaps too much of a good thing. My hives are doing well but moisture/dampness are perfect conditions for small hive beetle. I find the oil traps are the best way to control them but there are lots of options, chemical and none chemical. Good air circulation is important, especially so when it is wet and the grass is growing. Elevate hives off the ground to enable good air flow and keep the grass trimmed around the hives.

This time in the season is when you can add new frames and foundation to refresh the brood box. Removing frames from the sides of the brood box and replacing them by adding the new frames to the middle of the brood. Questions that people have in regard to bee management can be put up on What's App. There's always someone to help with good advice.

Cheers. Robert D

BEE FUTURES ENVIRONMENTAL SHOWCASE DAY

This Showcase Day was held on Sunday 27th February at Dr Lamorna Osborne's property on Old Bar Road. There were just over 30 people who attended the day despite the threat of more rain.

The day, which was organised by Melissa Wortman from Agrifood Industry Training Advisory Board was hosted by the Manning Valley ABA.

Speakers on the day included local commercial beekeeper Leif Andersen; Bruce White OAM (Biosecurity Officer for the NSW ABA & trainer for Cert III in Beekeeping) & Dr Lamorna Osborne. We were lucky to get into the field for some hands-on time with the bees just before the rain resumed.

Agrifood supplied a sausage sizzle lunch cooked by volunteers from the club.

The positive feedback from the day indicates that everyone went away having learned something new. Thanks to Agrifood ITAB for inviting the Manning Valley ABA to host the event.

Photos: Top: Listening to Bruce. Bottom: What's on this Frame?





IMPORTANT INFORMATION

Check DPI NSW "AFB Near Me" page each month for current infection locations.

Meet our Members

This month we talk to Ian Allan about his beekeeping journey.

I'm a novice beekeeper but had some elementary knowledge from my father from many years ago and I have earned my virtual degree on the subject from Youtube University (before so many ads appeared)

It's been two years since I established my first two hives at Tuncurry in the backyard with swarms caught in Tuncurry and Forster on the 3rd and 4th of September 2019. I had my boxes and gear ready for about a year before that.

In those two years, apart from watching them carefully, and very disappointingly seeing no honey was available, I was losing interest fast. I also had a couple of swarms fly out.

Reassurance from members Sven and Anna convinced me to hang in a little longer as the drought and fires were gone and rains would produce good blossom. And weren't they right!

My plan was to take a look at the beginning of September but right then I had a swarm fly out much to the annoyance of my neighbour. On opening both hives I was amazed to find them chock full of capped honey and nowhere for the large numbers of bees to move. 45 bottles were taken off.

Hives were rearranged but not before another two swarms got away, one of which I captured for my third hive.

By then my neighbour was becoming very angry for the reason she didn't like bees and wished I would get rid of them. This caused me to move the third hive to a friend's place. Things have steadied lately.

According to all who bought or were given a bottle (the neighbour refused the gift) they gave it 100% approval for flavour and colour.

Since then, one of the hives produced another 22 bottles and the other was not nearly as productive, so it was left alone. The honey was not of the same taste quality as the first lot.

CURRENT SMALL HIVE BEETLE OUTBREAK



This season has been a great season for the Small Hive Beetle. Several of our members have lost hives to the beetle in the last few months.

These last few months of wet weather followed by warm days have created perfect conditions for the small hive beetle which loves the humidity. A perfectly good hive can be infested and slimed out within days this season.

The following are some ways that we can try to control the beetles:

- Maintaining strong hives without too much space.
- Beetle traps (either internal or external under the bottom board) using oil or diatomaceous earth.
- Beetle Buster Bottom Boards.
- Chux cloth.
- Apithor Beetle Traps.
- Apis Small Hive Beetle Traps.
- Beetle Off Entrance Hive Beetle Traps.
- Fluffy mats on top of frames (e.g., Lino pieces with fluffy undersides);
- External Small Hive Beetle Traps (see trap lure recipe & directions below).

Note: Diatomaceous Earth (DE) when used in the traps can become moist in the humidity. When this happens the small hive beetle will breed in it. So, if using DE make sure that you check the trap regularly and change as often as necessary.

These methods vary in cost. Check what is best for you.



Small Hive Beetle at work



SHB Larvae

Small Hive Beetle External Trap Lure

- 3 Tablespoons honey
- 1 cup water
- 1 teaspoon yeast

Mix together and pour into a clean fruit fly trap or use a plastic drink bottle (600ml). Hang about 20 metres from hives in a shady spot about 1 metre from the ground. Check weekly to twice weekly. Pour contents through a small sieve. Be sure to kill any live hive beetle in the sieve. Replace the contents and put trap back into position.

To see about this trap, find the AgriFutures YouTube clip "Catching Small Hive Beetle: How to prepare and deploy lantern traps.

I have taken more care now in removing the side frames in the brood box and exchanging them for empty ones to provide more room. I have also added a third half box to provide room and for honey.

Some lessons learned from my experiences:

- Despite rainy days the bees still seem to accumulate honey.
- Check early spring to remove excess honey and make room in the hive to avoid swarming.
- Look for queen cells to anticipate swarming
- When extracting, don't spin too fast or your comb will be destroyed.
- Find out the best/easiest method to reverse candying without changing the quality of the honey.
- When you think you know how to "bee keep" you still have lots to learn.

Thanks for sharing your story with us Ian, I'm sure we can all relate to some of your experiences! (and I hope your neighbour has "sweetened up"!)

JUST FOR FUN!

What do you call a bee you can't understand?

A mumble bee.

Why did the bees go on strike? Because they wanted more honey and shorter working flowers.

What did the queen bee say to the naughty bee? Beehive yourself.

If you have a bee in your hand, what do you have in your eye? Beauty, because beauty is in the eye of the bee-holder.

What do you call a bee who keeps dropping things?
A fumble bee.

Where do bees go on holiday? Stingapore.

Where did Noah keep his bees? In his archive.

What do bees say when they return to the hive? "Honey, I'm home."

Source: LaffGaff

QUESTIONS

With so many new beekeepers now in our club it is a good time to answer some questions they may have. Other beekeepers may also ask some of these questions or benefit from them.

What's the best time to check my hive?

Pick a fine day where the temperature is over 18°C and not windy. Try not to work your bees on extremely hot days. Somewhere between 10am and 4pm is generally the ideal time of day. This is because the foragers are out of the hive so there are less bees inside the hive at the time.

What am I looking at in the brood box?

When you check the brood box you are looking at the health of your hive. Questions to ask while you are looking at the brood box:

- * how many bees are in the box?
- * is there capped brood? How many frames?



* are there eggs and larvae? Have the sun over your shoulder when looking for the eggs and larvae.

If there are too many bees on the frame to see anything then shake the bees off the frame so you can check the brood, etc.

- * what stores are there? Is there honey and pollen?
- * how many colours of pollen are there? 3 or more is healthy for the hive.
- * how does the brood pattern look? Are the caps concave or convex?
- * Did you sight the queen?
- * Are there small hive beetle?
- * How much room is left in the brood box? Is there still room for the queen to lay eggs?
- * Are there queen cells?



Use your logbook to note your observations. The answers to these questions can lead to the following questions.

When do I need to add a super to my hive?

When you open your hive and the bees spill out of your box or there is a thick carpet of bees on top of the frames in your hive, you need to add a super. Sometimes you will find burr comb, or silly comb, on top of the frames. If you find this get a clean bowl, smoke the comb to encourage the bees to go and then use your hive tool to scrape the comb off the frames before you add a super. If this is above brood box add an excluder before putting the super on. This comb may have honey which you can strain using muslin or a sieve. The wax can later be melted down.



WEIRD BEE FACTS

BEE STINGS HAVE SOME HEALTH BENEFITS.

A toxin in bee venom called melittin may prevent HIV. Melittin can kill HIV by poking holes into the virus's protective envelope. (Meanwhile, when melittin hitches a ride on certain nanoparticles, it will just bounce off normal cells and leave them unharmed.) Scientists at Washington University in St. Louis hope the toxin can be used in preventative gels. Bee stings may also ease pain caused by rheumatoid arthritis. Researchers at the University of Sao Paulo found that molecules in bee venom increase your body's level of glucocorticoid, an antiinflammatory hormone. **BEE BRAINS DEFY TIME.**

When aging bees do jobs usually reserved for younger members, their brain stops aging. In fact, their brain ages in reverse. Scientists at Arizona State University believe the discovery can help us slow the onset of dementia.

BEES HAVE VIKING-LIKE NAVIGATION TECHNIQUES.

Bees use the Sun as a compass. But when it's cloudy, there's a backup—they navigate by polarized light, using special photoreceptors to find the Sun's place in the sky. The Vikings may have used a similar system: On sunny days, they navigated with sundials, but on cloudy days, sunstones—chunks of calcite that act like a Polaroid filter—helped them stay on course.

BEES ARE NATURE'S MOST ECONOMICAL BUILDERS.

In 36 BCE, Marcus Terentius Varro argued that honeycombs were the most practical structures around. Centuries later, Greek mathematician Pappus solidified the "honeycomb conjecture" by making the same claim. Almost 2000 years later, American mathematician Thomas Hales wrote a mathematical proof showing that, of all the possible structures, honeycombs use the least amount of wax. And not only are honeycombs the most efficient structures in naturethe walls meet at a precise 120degree angle, a perfect hexagon.

Source: mentalfloss.com

You need to make sure there is room in the brood box for the queen to lay eggs. If not, you will need to make room. This can be done by taking two frames out of the brood box and putting them up into the new super. The frames you lift should be frames of honey (most likely to be the two outer frames) that may also have capped brood. This will entice the bees up into this super. Replace with two frames of foundation from the super. Leave the middle two frames of brood in place and put the foundation frames either side of these pushing the remaining frames outward. This not only gives the bees more room in the brood box, but also encourages the bees into the new super.

What if I can't see my queen?

You may not always see your queen when you check your brood box, but that doesn't mean she is not there. When checking a frame check towards the bottom of the frame as often the queen will scurry under the frame to the other side away from the light. If you have seen eggs and larvae, then you know there is a queen somewhere in the hive.



If you don't see any eggs or larvae check the empty cells on the frame. Are they highly polished? If yes, they are waiting for a queen to start laying. You may see queen cells or a queen cell that has recently hatched.

A queenless hive will make a different sound when you lift the lid. Learn to recognise the normal sound of your hive so you notice the difference.

If you suspect your hive doesn't have a queen, or you have noticed queen cells, contact the club for what you need to do next.

• What do I do if my queen gets above the excluder?

Sometimes you may find that you have eggs, larvae and/or brood above the excluder or you may sight the queen. The queen may have got through the excluder before her abdomen enlarged or she may have been on a frame that was lifted into the super. When you take frames from the brood box to put into the super check carefully for the queen. Check metal excluders to ensure there hasn't been a slight bend in one of the sections. If so, try to correct this so it doesn't happen again.

Once you have determined that the queen is somewhere above the excluder take the frames out of the super one by one and shake the bees off in front of the hive entrance. As you do take the frame and put it into an empty super. Once you have done all the frames take the empty super box and shake all the bees out of this too. Keep an eye out for the queen as you do this and be careful you don't kill her. Put the excluder on the brood box and place the super back on top and close the hive back up. The bees, including the queen, will go back into the hive and the queen will be back below the excluder.



How do I know when to take honey off the hive?

Honey needs to be 'ripe' before removing from the hive. When placed in the cells, honey has a high moisture content, so the bees set about removing the excess moisture. When they get the honey to right moisture the bees cap it off. When looking at frames to remove for honey you need to check how much of the honey is capped off. If at least 75% is capped, then it is ok to remove for extraction. Please ensure that there is no brood in the frames to be extracted.

RECIPE Creamy Honey Mustard Chicken

- 2 large chicken breasts (cut in ½ lengthwise)
- Salt & pepper to taste
- $\frac{1}{4}$ teaspoon garlic powder
- Flour for dredging
- 1 Tablespoon olive oil
- 3 Tablespoons butter (divided)
- 1/₃ cup chicken broth
- 2 Tablespoons Dijon mustard
- 1 Tablespoon honey
- 1 cup heavy/whipping cream
- 1. Prepare chicken (cut in half lengthwise so you have 4 smaller pieces). Sprinkle with garlic powder and salt and pepper and then coat in flour.
- 2. Heat oil and 1 tablespoon of butter in a pan over mediumhigh heat.
- 3. Once pan is hot, add the chicken pieces and cook for 4 to 5 minutes per side or until they are golden. Reduce heat if oil starts to splatter. Once chicken is browned, take it out of the pan and set it aside.
- 4. Take the pan off the heat and add the rest of the butter, chicken broth, Dijon mustard and honey.
- 5. Return the pan to the stove and adjust the heat to medium. Stir the sauce until the mustard has dissolved (make sure liquid doesn't reduce completely).
- 6. Add the cream. Once the sauce is bubbling again, add the chicken back in. Let it cook for 5 minutes or until the chicken is cooked through and the sauce is thickened to your liking.
- 7. Serve with vegetables.
- saltandlavender.com/creamyhoney-mustard-chicken/





When taking honey from the hive don't forget to leave some stores for the needs of the bees.

How do I check for pests and diseases?

If you haven't already done a pest and disease course, then now is the time to do one. The Biosecurity Online Training (BOLT) course on the Plant Health Australia website is highly recommended (https://www.planthealthaustralia.com.au/resources/training/biosecurity-online-training/). This course is currently free. It will give you a good idea of what you need to look for when you are doing a hive check & what needs to be done if there is a problem.

A quick overview of what to look for:

* American Foulbrood (AFB): check for irregular brood patterns, sunken and discoloured cell cappings with perforations. Check cells with a matchstick for roping. If present it will be AFB.



- * Chalkbrood: check for scattered brood with perforated cappings and cells with white/grey mummies.
- * European Foulbrood (EFB): Spotted brood pattern intermingled with healthy brood, sunken and greasy cappings and a foul smell. Affected cells don't rope like AFB.
- * Wax Moth Cobweb type tunnels across several cells and grey-coloured moths or creamy coloured larvae on combs.
- * Noesema: Honeybees crawling around with swollen, greasy abdomens and signs of dysentery around hive entrance.
- * Sacbrood: Uneven brood pattern with discoloured, sunken, or perforated cappings. Dead larva becomes banana shaped and goes from yellowish colour to dark brown-black.
- * Small Hive Beetle: Black beetles and small grublike larvae, which when in large numbers can cause the honey to ferment and become slimed.

If you find anything that you think may be a problem, but you are not sure, contact the club.



Notice of ABA Annual General Meeting and Vote on Special Resolutions

Notice is hereby given that the Annual General Meeting (AGM) of The Amateur Beekeepers' Association of NSW Incorporated (ABA) will be held at **10.00 AEDT (Sydney)** on **Saturday 12 March** online via Zoom.

The link for this Zoom session was sent to members on February 18