

BEELINES

NEWSLETTER OF THE BEEKEEPERS CLUB INC

NOVEMBER 2017

Official Opening of the Club Apiary



Corrie Heslop of the St John's Community Garden and Mat Lumalasi, President of the Beekeepers Club, hold the official ribbon for Cr Peter Castaldo of Banyule City Council to cut.

UPCOMING EVENTS (CONTINUED)

NOVEMBER 2017 BEGINNERS COURSE

25th Nov 2017 9:30 AM

Heidelberg Lower Hall, St John's Anglican Church, 1 Burgundy St, Heidelberg. Full details on club web site (Events).

QUEEN REARING COURSE

2nd and 3rd Dec 2017 9:30 AM

Club Apiary, St John's Anglican Church, 1 Burgundy St, Heidelberg. Full details on club web site.

JUNIOR BEEKEEPERS CLUB MEETING

Hive opening and sugar shake

25th Nov 2017, 10:00 AM

33 Saxon St, Brunswick.

UPCOMING EVENTS

CLUB MONTHLY MEETING

Apimondia Istanbul 2017 Report presented by Aris Petratos and Andrew Wootton

16 Nov 2017, 7:00 PM

Doncaster Secondary College, 123 Church Rd, Doncaster (Melway 33 G12).

CLUB COMMITTEE

| | | |
|----------------------|----------------|---------------------------------|
| President | Mat Lumalasi | president@beekeepers.org.au |
| Vice President | Helmut Huber | vicepresident@beekeepers.org.au |
| Secretary | Amanda Lamont | secretary@beekeepers.org.au |
| Treasurer | Stuart Stone | treasurer@beekeepers.org.au |
| Training Facilitator | Andrew Wootton | training@beekeepers.org.au |
| General Committee | John Treloar | committee@beekeepers.org.au |
| General Committee | Lyndon Joss | committee@beekeepers.org.au |
| General Committee | Dan Milic | committee@beekeepers.org.au |
| General Committee | Alan Walton | committee@beekeepers.org.au |

APIARY OPENING

The club in conjunction with the St John’s Community Garden group hosted a very successful day on October 15th to celebrate the official opening of our first ever dedicated club apiary.

The apiary currently hosts 6 hives, 4 belonging to the club and 2 to the community garden.



Bees were talked and the BBQ kept sizzling. As usual the catering by both St John’s garden group and the beekeepers could not be faulted.

Around 100 guests attended and we happily found out that gardeners and beekeepers have a lot in common, new friends were made and a few conversions to beekeeping initiated.



Bees and Gardeners



Andrew Wootton deep in conversation

We thank Andrew for the hard work and many hours he has put into the Apiary and Nuc Nanny program.

NEW MEMBERS

We warmly welcome the following new members and wish them well on their beekeeping journey.



Andrew Elms, Sandy Hatcher, Stephen Jones, Jason Laing, Venu Metla, Jon Nicholls, Belinda Nicholls, Sandra O’Grady, Vincent O’Grady, Des Ryan, Kerrie Sefton, Jill Tait and Robert Townsend.

Please take advantage of our club resources, including meetings, library and apiary and most importantly our club members knowledge. If you have any questions about beekeeping just ask. I also recommend our forum page for Q&A’s.

NUC NANNY PROGRAM

We have just completed the first Nuc nanny project at the apiary.

For this program, we purchased and supplied 10 queens from a commercial supplier. Under supervision, participants set up a nucleus hive at the club apiary. A corflute nuc and frames of brood from the club hives were supplied. Over 4 weeks we assisted with inspections, monitoring release and laying.

The program required weekly weekend apiary visits and on completion the participants took the nuc home to install in their own hive.

Due to limited resources this program was available to members only. Our intention is to assist new members who have just completed the beginner's course in getting a flying start. The course was a huge success and Andrew will be running another similar program next year.

JUNIOR BEEKEEPERS

I thank John Treloar who stepped in to take the juniors on Saturday 21st October and introduced the kids to the Flow hive. John after checking the brood box installed the flow hive for the coming season and did a great job in explaining the brood box condition and then the flow hive and its workings to very appreciative young beekeepers.

Unfortunately the weather after an almost perfect week had to turn and the threat of dark clouds, wind and rain

caused the hive opening to be somewhat shortened however enough was done to ensure the juniors interest was satisfied. Other commitments including a large scout's event, weather and other activities had an effect on our attendances but we still had 8 interested beekeepers turn up. As usual a fact sheet this month based on the bee life cycle and brood cells was distributed.

Prior to the hive opening John explained what we would be looking for in the brood box and the preparation of the Flow hive before installation.



Checking brood and hive condition all done by kids under John's supervision



Work done, Flow hive installed. Great work kids and thanks John!

JUNIORS' IMPORTANT NOTICE

The next Juniors' meeting will be Saturday 25th November 2017, 10.00am at Saxon St. Activity will involve checking 2 hives for general health and signs of disease and doing a sugar shake test for Varroa.

Note: the change of date is due to State Quarantine Response Training (SQRT) program being conducted on that same day at which a number of our senior club members will be involved.

APIARY OPEN DAYS

The club apiary will be opened for members benefit and training on the following days. Any member is very welcome to come down and participate or just talk bees.

Sunday 19th November 2017. 12.00 - 2.00pm

Saturday 9th December 2017. 11.00 - 2.00pm

AMERICAN FOUL BROOD ON THE INCREASE

Recent reports indicate that 1 in 10 hives inspected at the Robinvale almond pollination program showed evidence of AFB. With over 1000 hives inspected this indicates 10% of hives may be infected. Other industry reports indicate a rise in the incidence of AFB this season within the general industry.

AFB

American foulbrood (AFB) is a fatal and incurable brood disease of European honey bees (*Apis mellifera*). AFB spores are spread in contaminated honey and apiary products, hive parts and equipment. Robbing out of weak hives is a key means of spread. A single infected hive can quickly infect nearby hives as healthy bees rob out contaminated honey. As more and more hives contract the disease, the cycle perpetuates leading to serious outbreaks that can impact entire regions.

American foul brood (AFB) begins in honey bee larvae after they swallow AFB spores with their food. Within 24-48 hours, the spores germinate in the gut of the larva and develop into vegetative 'rods'. The rods grow and invade the haemolymph and body tissues, killing the infected larva before pupation, usually immediately after the brood cell is capped.

If a bee larvae less than 24 hours old is fed 6 to 10 AFB spores in its food by nurse bees this then may cause the larvae to be infected and die from AFB. The bacteria will multiply, producing approximately 2.6 billion spores in each dead individual. The action of the house bees in cleaning up the diseased brood will lead to more young larvae being infected.

The final stage of the bacterium's lifecycle is reached when the vegetative rods form into spores. Approximately 2,500 million spores may occur in the remains of a single infected honey bee larva.

AFB is currently the most deadly and expensive threat to beekeeping in Australia.

DETECTION OF AFB

1. Inspect your hive visually for typical symptoms which may include Irregular and patchy brood pattern. Cell capping's on infected brood may also appear sunken, and darker coloured or greasy and may be perforated.
2. Test by an AFB honey sample and send to Gribbles Pathology for a spore count test. Test kits can be obtained from either the club or direct from Gribbles. Remember the cost of the test approximately \$34.50 is fully refundable from the club on presentation of your paid invoice.
3. Notify the Bee Biosecurity Officer Jess Hartland or Apiary Officers Daniel Martin or Joe Riordan if you have a positive test result. These officers will direct you through the appropriate steps you must take.
4. Act to ensure you do all you can to reduce the threat and spread of the disease through your apiary and those of other beekeepers. Practice good clean apiary work methods.

The code requires beekeepers to inspect hives at least twice a year and keep accurate records of findings. If you do not have your field and hive record book as supplied by the club please ask at door for a free copy.

It must be noted that honey bees (*Apis mellifera*) are classed as livestock under the Livestock Disease Control Act 1994. As such, AFB is a notifiable disease, meaning that a beekeeper is required to notify a DEDJTR Apiary Officer if they have, or suspect they have, detected AFB in their colony /colonies.

For the correct interpretation (and follow-up beekeeper action) I have provided the below figures regarding HCT spore counts and the corresponding likelihood (%) of having visual symptoms of AFB in a colony. A spore count of 1 should be regarded as a low reading and would not require destruction of the hive at this stage. However, a spore count of 1 should signal a potential red flag, a warning that AFB bacterial spores may be present within that colony / apiary, triggering the beekeeper to be on watch. In other

words, be vigilant with future regular brood inspections in that colony /apiary.

| | |
|-------------------|---|
| Spore count (cfu) | chance of having visual symptoms of AFB |
| +1 | 56% |
| +2 | 80% |
| +3 | 100%(destroy hive) |

It is very important for beekeepers to be aware that it's their responsibility to make their final decision regarding the fate of the colony based on actual visual AFB field symptoms of brood within their colony /apiary. If the beekeeper is unable to correctly diagnose AFB brood symptoms the beekeeper should seek advice from a DEDJTR Apiary Officer or a club member who is competent with disease diagnosis.

RESPONSE TO AFB

If the hive has to be destroyed the correct method is:

1. Euthanize the bees (petrol or chemical spray)
2. Options for disinfection of infected hive materials:
 - a. Burn all hive components bottom board, supers, frames and lid. If your council will not allow burning in situ, you are allowed to wrap the components in a heavy duty plastic waste

If you do come across AFB and make the decision to irradiate your equipment below is the protocol from Steritech 160 South Gippsland Highway, Dandenong, VIC 3175 Dandenong.

PROTOCOL FOR THE IRRADIATION OF BEE BOXES

In order to irradiate bee boxes at Steritech, the following procedures must be followed prior to delivery:

1. Boxes must be Bee/Spider free
2. Boxes must be Wax/Honey free
3. Boxes must be thoroughly cleaned (preferably with high pressure hose)
4. Each box (single) must then be bagged and taped, then stacked into triples with a lid and a base
5. Each triple unit must then be double strapped using "EM" locks with a clip at the bottom of the unit under the base
6. Each unit (triple) must then be bagged, sealing the entire unit
7. Units must not total more than 25 kilograms or receipt will be refused
8. If triple units exceed the 25 kilograms, units can be stacked into doubles
9. Units cannot exceed dimensions of 89cm x 44cm x 54cm
10. Own transport must be arranged and appropriate paperwork must be lodged
11. Payment must be made prior to, or at time of pick up

Note: If any of the above procedures are not followed, Steritech may choose to refuse receipt or despatch of goods. Any queries should be directed to Chris Webb, Gamma Irradiation Supervisor or Ray Bryden, Sales Executive on the following numbers: Telephone: 03 87265514 Facsimile: 03 9701 3158

- bag, tape joints to make airtight. Re wrap in a 2nd bag again taping joints and the parcels can be taken to a deep bury rubbish tip or recycle depot that takes contaminated materials. Most local councils will accept but a quick phone call beforehand would be advisable.
- b. Disinfection by gamma-irradiation (available through Steritech Dandenong)
3. Hand tools, gloves and clothing should also be wrapped and disinfected as per point 2a or b.

Lastly, it's very important to register with the Department as a beekeeper. In fact it is a legal requirement under the Livestock Disease Control Act 1994, and it's free for beekeepers that have 5 hives or less! As a registered beekeeper a scheme for financial compensation is available for hive loss from AFB if you, as the registered beekeeper, have notified a DEDJTR Apiary Officer of this serious disease. *(Thanks to Daniel Martin for contribution to the above article reprinted from an earlier Beelines edition).*

If we conservatively estimate that our current members are stewards to about 1300 hives then it is reasonable to assume that 2 or 3 members will encounter AFB so please take heed of the above and know what to do in an emergency.

THE SUGAR SHAKE TEST

It is now a requirement under the National Biosecurity Code of Practice (part 3.2) to conduct at least 2 inspections per year at a minimum of 4 months apart. At least one hive in each apiary should be examined for the presence of arthropod pests including Varroa and Tropilaelaps mites using one of the following methods.

- Sugar Shake
- Alcohol wash
- Drone uncapping

Those members who have nominated to participate in the sugar shake test program through the DEDJTR should have received a letter from the Department requesting you to carry out your first test and report the findings. Please ensure you get your results back by the requested date.

MAKING YOUR OWN SUGAR SHAKE TEST EQUIPMENT

A sugar shake test is a simple way to monitor for varroa without killing your bees. It is easy and fast and only a few items are needed and they should last for years.

To make a sugar roll jar you will need a few easy obtainable items.



- Wide mouth 500gr jar preferably plastic with a two piece lid.
- Screening-#8 mesh (8 squares per square inch) is preferred but you can use any screening as long

as it allows the mite to fall through and keeps the bees contained inside the jar.

- Tin snips-used to cut out screen for placing into the lid, refer to image.



The first step to making a sugar roll jar is to remove the lid and remove the circular insert. Trace this insert on the screening using a pencil or black marker. Next you can take the tin snips and cut out the circular screen. Once the screen circle is cut out, place it under the threaded part of the lid to see if it fits, you may need to further trim until you get a good fit. Make sure there is no space for the bees to escape.

Now your sugar roll jar is finished and ready for use.

PERFORMING A SUGAR SHAKE TEST

You will need your jar, a small scoop to accommodate 300 bees and icing sugar and a bucket.

- half fill the bucket with clean water
- place a heaped tablespoon of icing sugar into the jar
- light a smoker and open a hive to be tested
- shake some bees from three combs containing honey bee brood onto a double thickness of newspaper or upturned hive lid placed on the ground. If brood is not present, shake bees from one comb taken from the centre of the cluster of bees. If you find the queen on these combs, place her back into the hive
- scoop or pour about 300 bees (half a cup) into the jar. Place the lid on the jar to prevent bees from escaping

- gently rotate the jar for 2 minutes ensuring all bees are dusted with sugar. Wait 2-3 minutes, and rotate the jar a second time for 2 minutes. Be careful not to lose any sugar. (The hive may be reassembled during this waiting period)
- gently shake the icing sugar (and any mites) through the holes in the lid into the bucket half filled with water. The sugar will dissolve and any mites will float on the surface of the water. Do the shaking in a sheltered position protected from strong wind that could blow mites away



Photo 4. Gently shake the sugar into the bucket containing water

- release the bees from the jar onto the ground close to the hive entrance in case the queen is present

- examine the empty shaker jar and lid for varroa. If you wear glasses to read, wear them while looking for varroa. The mites are reddish-brown; 1.1 mm long and 1.7 mm broad
- inspect the water surface for varroa, other mites and insects. If you find any, carefully place them into a small jar with methylated spirits and place the jar in a cool position away from sunlight
- alternatively, pour the water through a piece of light coloured fine close-weaved household cleaning cloth, or coffee filter paper. Inspect the cloth or filter paper for varroa, other mites and insects. If any of these are present or suspected to be present, place and seal the filter cloth or filter paper in a small zip-lock plastic bag or other sealable container
- use a water-proof pen, label the specimen jar and/or ziplock bag and the hive tested with the same number for later identification.

For more detailed instructions visit agriculture.vic.gov.au/.../pests.../sugar-shake-test-detection-of-varroa-mite

Text and image from DEDJTR website.

BIOSECURITY ON LINE TRAINING COURSE

There is an online Biosecurity course available to all beekeepers and it is highly recommended that all club members participate in this program. Full details can be obtained from

<http://www.planthealthaustralia.com.au>

The course is free to members with 50 or more hives by obtaining a token through the website or \$ 20 for beekeepers with less than 50 hives.

The course will take about 1 hour and a certificate is issued on successful completion.

B-QUAL

INDUSTRY OWNED QUALITY ASSURANCE SYSTEM

If you have more than 50 hives and/or sell honey at markets or other outlets, consider finding out more about B-QUAL.

You can enjoy practical quality assurance designed by and for beekeepers. Demonstrate to your clients that you operate in accordance with industry requirements and the expectations of consumers.

Contact: B-QUAL on toll free number 1800 630 890

Email: bqual@ausqual.com.au for further details

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