

Issue 10, March 2018

## **Upcoming Events**



### **Bee Trade Exhibition**

Date: 3rd March 2018 Time: 9am - 4.30pm

Bee Trade Exhibition in Stoneleigh, Coventry, CV8 2LG. All of the major beekeeping equipment suppliers will be there.

**Click Here For More Info** 

### Discussion On Winter Losses And Feeding

Date: 10th March 2018 Time: 2pm Place: Whalebones



We would like to know how our members colonies have done over the winter months and discuss colony survival rates.



### **Nosema Testing**

Date: 7th April 2018 Time: 2pm Place: Whalebones

We invite our members to bring samples to Whalebones to get their colonies tested for Nosema.

# **BBKA Spring Convention**

Date: 13th - 15th April 2018



With 20+ lectures and 50+ workshops, the programme offers topics for beginners through to experienced apiarists and something for non beekeepers too.

The Trade Show will be open on Saturday 14th only this year with all main suppliers and leading companies represented.

# **Note From Chair**

2018 is now well underway. Happy New Year and Good Beekeeping to all.

The damp weather has been difficult for the bees and some colonies are looking smaller than hoped. Most colonies will have fondant on by now and once started it is important to keep feeding until the forage begins to appear in sufficient quantity.

Like me, I am sure you are fighting the urge to stay inside, and getting out to clean all the boxes, do running repairs and make all those frames for the comb changes ahead. It is a great advantage to start the season with equipment ready and well worth getting ahead. I always regret when I fail to make the effort!

On March 10th we are holding a discussion of how our colonies overwintered. Some losses are inevitable during time as a beekeeper, but when it happens it is always useful to analyse and understand the reasons why.

Middlesex Federation Day was held on Saturday 24th February, hosted by Pinner & Ruislip Association. There was a good attendance and Barnet was well represented. Good to see so many of you there. It was an enjoyable and informative day with a talk on Food Hygiene around honey processing from Andy Pedley, a Harrow Association member, an excellent overview of Honey Bee Sense Organs from John Hendrie, previous Chair of BBKA, and a summary of research at Royal Holloway College on the Urbanisation of bees, covering changing foraging patterns. It was helpful to meet with members of other constituent Associations of Middlesex, and to discuss ideas and experiences. Next year will be hosted by Harrow to mark their Association centenary. A definite must for the diary.

The 2018 Beginners Course started on 27th January, and there will be lectures and demonstrations every Saturday 10 am at Whalebones, with days off for Bee-Tradex and Easter. The full programme will appear on the website. Thanks to Lorraine Patel for co-ordinating students and speakers. Why not come to some or all of the lectures to support our new members, our tutors, maybe even to contribute or learn something new?

We have an updated website, thanks to Wilf Wood, and work is still going on to develop it fully. Take a look and see, feedback should be directed to editor@barnetbeekeepers.com. In addition, we are devising a Privacy Policy to bring the Association into line with legislation due in this May. This is all a considerable amount of administrative input. Thank you to all members of the committee who are working so hard on our behalf.

Pat Morgan

# Contributors

A big thank you to Geoff Hood, Ripal Parekh and Pat Morgan for their contributions to this issue. Big thanks to Wilf Wood too, for updating the Barnet Beekeepers Website.

If there are any areas of beekeeping you would like to know more about, let us know and we will try to provide information on the subject. Also, if members would like to contribute any articles please get in touch <u>here</u>. We have

members who have been keeping bees for many years and some who have just started: we would love for members to share their ideas and experiences so far through this newsletter.

Adam Armstrong

# In The Apiary - March

By Adam Armstrong



The days have started to get longer and our colonies will have started preparations for the new season, ensuring foragers are available when the spring flowers start to pop up. The eggs being laid in our colonies right now will be the foraging bees come Spring.

There is no reason to look in our hives but we can make observations. If you use open mesh floors you will see the wax cappings where the bees have accessed their stores. This will give a good indication of where the bees are within the brood box. The heat generated by the bees can often be felt through the brood box wall as another indication to where they maybe located, since brood rearing temperature inside the cluster is 34°c. It is important to visit our hives regularly to check for damage from strong winds or other nuisances, such

as woodpecker damage. And of course we must heft the hives to check stores. A couple of years ago I lost a colony that became isolated from their stores, so this year although I have left a super underneath the brood box I have added some fondant as well as a precaution.

As there is not a lot to do in the apiary, now is a great time to make sure all your equipment is weather proof, clean and has been torched ready for the new beekeeping season.

Good Luck!



You may have noticed that the web site changed dramatically recently. I have had this as a project for some time: not just to give the site a new look, but to make it usable from a mobile or tablet device. The old site had not been updated for some time and was not compatible with mobiles. The new site also incorporates the social media of twitter and Facebook, plus I have a request to provide a link to the most common beekeeping forum as well.

There are some further additions to be made to the site. These will include adding the links to beekeeping related companies, links to our newsletter and more downloadable content. Any volunteers to write up useful tips or how to make various gadgets etc?

Your feedback is appreciated as it is 'your' web site and any requests or content will be welcomed by editor@barnetbeekeepers.com.

# **The Microscopy Certificate**

#### By Pat Morgan



This assessment provides a qualification and measure of competence for those with an interest in pollen, anatomy and disease relevant to the honey bee. The examination consists of practical tasks and oral questioning. Candidates need to hold the Basic Assessment, and gaining the certificate gives exemption from the disease orientated tasks of the Advanced Husbandry Assessment.

The candidate will need to prepare six pollen slides and four anatomy slides in the year prior to the assessment. The assessment lasts two and a half to three hours and the candidate must provide two suitable microscopes and equipment necessary to carry out dissections and make slides.

That is what the BBKA summary of the assessment says. So, in August of 2016 I looked at the syllabus and prospectus and thought about applying to sit the exam that November. I had a few pollen slides that I had made over the years, had been on a microscopy course a few years ago and had used a microscope quite a bit at one stage in my career. I did not see too much of a problem.

I pulled out the pollen slides but found they were woefully inadequate. Then when I started to plan the making of anatomy slides and discussed it with other prospective candidates, I realised that it was going to take several months to get even four slides that I could take to an exam. This really was going to take a full year of preparation.

The next Spring, I collected pollen samples, making slides and storing some pollen in alcohol and some in the freezer to ensure I had sufficient to have several attempts at the slides so as to get the depth of stain and spread of the specimen just right. It is so true that practice makes perfect and only by repeated attempts, with minor tweaks to procedure each time, did I achieve anything that satisfied me. By this time our dining room looked more like a laboratory, and eating in there was impossible. Microscopes, heating plates, bottles of various reagents carefully stored to comply with safety regulations, slides, coverslips and various lamps for good illumination covered every surface and much of the floor. Richard, my husband remained stoically tolerant.

All that was before the dissection practice and anatomy slide making began. Days and evenings were taken up with preparing samples for mounting on slides. It can take fourteen days to prepare a sample fully and then while mounting it on the slide it can move as the coverslip is lowered or a shower of bubbles forms as it dries, ruining two weeks of effort. The table became a production line of multiple bee parts in small jars moving through stages of preparation. It was a case of repeating again and again, but very satisfying when the end result came out something like right. I became an expert at spotting imperfections in slides - and all mine had them! I was fully versed in what could go wrong, possible reasons why and textbook, if not always successful, solutions. Even labelling the slides was not without problems, but hours at the laptop with liberal use of waterproofing sprays eventually produced something suitable and indelible.

Alongside the practical work there was revision of the theory, so time spent reading too. I had two fellow beekeepers with whom I met to discuss problems and revise on a weekly basis. This support was invaluable and one joined me in taking the assessment last year. The preparation was proving to be quite a commitment and did mean other things were rather ignored.

Eventually the day of the assessment dawned. I had boxed up the best of the slides I had made, together with microscopes, dissection pack, sharps disposal, water for Nosema sample preparation. And then the poor bees: a sample of about forty live bees that I had collected from one of my hives the afternoon before.

The exam centre was booked at a village hall about thirty miles away. I had been on a practice run to make sure I did not get lost on the day, so arrived in good time.

Although exam conditions were observed we were made welcome by the examiners, coffee and tea were readily available and a relaxed atmosphere created for us. We all had a station to work at and went through the tasks set in different orders allowing the examiners to come to us in turns. I discussed my slides and was able to show their good and bad points and was asked politely to suggest reasons for the less good ones. My dissections of the first trachea to look for acarine mites and of the abdominal organs went smoothly. There were

slides of unknown pollens to describe and slides of bee pests and diseases to identify. There were questions on light microscopy and the workings of the microscope and the demonstration of setting up a microscope from scratch. Finally, there was a discussion on Health and Safety and risk assessment in the laboratory.

The day proved to be surprisingly enjoyable, even relaxing. The many hours of preparation felt worth it whatever the result. Just after Christmas I was delighted to hear that I had passed as had my co-reviser. I learned an enormous amount about microscopy and the practicalities of pursuing it in the home environment. You need space to leave things during processing, an understanding family, and suitable storage facilities for chemicals. It has to be carefully planned and if working towards an exam you must get started in good time. I intend to continue with pollen collection and slide preparation and will look at my honey each year to see what pollens it contains. I may give the bee anatomy a rest for a while. Though the very next slide could always be the perfect one......

# **No Cure For Nosema?**

By Geoff Hood



It has been several years now since Fumidill B, the old treatment for Nosema, has been off the shelves of retail shops. Currently <u>there is no approved product</u> that you can use on a hive to treat Nosema. This, of course doesn't stop many of you asking how to treat hives affected.

The National Bee Unit approved method of treating Nosema is to carry out a Bailey comb change. I am not going to repeat how to do this here: the relevant links are on the NBU website.

I am also often asked about those proprietary hive sanitisers & bee tonics which are not treatments in the eyes of the NBU, but are supposed to be beneficial for bees with Nosema .

I have to stress again but these hive sanitizers or bee tonics are not approved by the National Bee Unit nor by the Veterinary Medicine Directorate: you are therefore using them at your own risk, and I do not vouch for them in any way.

Let's go through them one by one:

**Nosevit** - Made from plant extracts & essential oils, it is mixed with syrup which is either sprayed on the bees on the comb, or 250ml of treated syrup is drenched along the seams similar to ApiBioxal or Oxuvar dribble.

**Hive Alive** - A solution based on Thymol is mixed with syrup, and is either sprayed on the bees and comb, or bees are drenches with 300ml as above.

**Manley's Solution** - An emulsion of Thymol Crystals, Lecithin, Isopropyl alcohol and hot water, this was originally added to winter feed to stop the sugar fermenting, it was found that that at X2 concentrations in syrup also reduced nosema disease in overwintering hives. An alternative method of applying this is to spray the Manleys solution x4 concentration in syrup direct on the comb of bees.

Should you or they say any of these are treatments, the manufacturers could then be liable to prosecution by the Veterinary Medicines Directorate! Very few have been tested on hives . It is entirely possible that you may get traces of Thymol or essential oils in stored honey if you use these products.

Therefore proceed with caution. If you feel you wish to use these products, you are not doing so on our association's recommendation, though you are unlikely to cause your bees harm.

# **Small Hive Beetle and Asian Hornet**



The Asian Hornet (Vespa velutina) preys on honeybees, it has altered the biodiversity in regions of France where it is present and can be a health risk to those who have allergies to hornet or wasp stings.

In 2016, the Asian hornet was discovered in the UK for the first time, in Tetbury. After 10 days of intensive searching, the nest was found and later destroyed and on the same day, a single hornet was discovered in a bait trap in North Somerset.

#### The Small hive beetle

(SHB), *Aethina tumida*, is an invasive species originating from Africa which has proved to be a serious pest of honeybee hives in the USA and Australia. The SHB is a notifiable pest.

# Notice

Dear BDBKA member,

APHA (Animal and Plant Health Agency) has upgraded the threat of the small hive beetle in our area.

We all need to be vigilant due to the increased possibility of the Small Hive Beetle coming into the area via freight lorries along the M25, A1M and M1 corridors.

An updated booklet from the National Bee Unit can be found through the link below and I encourage you all to read it.

Geoffrye Hood Vice Chair and BDBKA Bee Disease Inspector

#### Click here for Small Hive Beetle PDF

Learn to recognise this invasive species: sightings should be sent with a photograph and location details to <u>alertnonnative@ceh.ac.uk</u>

# **Queen Rearing At Burnt Oak**

By Ripal Parekh



#### Background

I took two hives into winter at the end of the 2016 season. In early spring of 2017, when I started inspections I noticed that Hive One was much more aggressive than I remembered it being at the end of the 2016 season. Hive Two appeared not to have gone into lay and the queen wasn't anywhere to be seen. I tried to introduce eggs to the hive, yet no queen cells were drawn suggesting a queen was still present but not laying.

Andy, who is a fellow beekeeper, had similar problems with his bees. He had aggressive bees on two of his hives, one on the Burnt Oak site and his other site in Windsor. After unsuccessfully trying to introduce bought queens, we decided to try to raise our own. Andy purchased a Nicot Cupkit from eBay, so we decided to have a go at raising our own queens using the Nicot method.

I have split the article into 3 sections: first, the equipment we used; second, the preparatory steps performed; and lastly, a description of each of our attempts at queen rearing. We did this towards the end of June through to the start of August so it was rather late in the season. However the new queens were mated and accepted into their new hives.

#### Equipment Used



Figure 1 - Cell-bar frame

Figure 2 - The Nicot Cupkit cage



#### Figure 3 - Cell protectors



- Super frame (without any foundation) modified to take a Nicot Cage (see fig 2)
- Frame with 3 rows of cup bases (see fig 1)
- Hair roller cages (fig 3 from beckysbeesonlineshop.co.uk)
- Modified super frame with 1 cup base to introduce new queen to hive.
  (no photos taken unfortunately but is literally a super frame with a cup base fixed to the centre of the top bar with some melted wax.)
- Hive 1: Aggressive Hive that is to be re-queened (14 x 12) this was a hive with 11 frames, of which 6 were frames of brood, and the rest stores.
- Nucleus hive into which we introduced our bought in queen, which we then trapped in the Nicot cage provide eggs for the queen raising (14 x 12). These will be referred to in the subsequent sections by letter (a –f)

#### Preparation

Week 1: We made up a nucleus (f) of two frames with nursing bees and introduced a Ged Marshall mated queen to the nuc in its travel cage after removing the attendants that came with her.

Week 2: The queen in the nuc (f) was still alive in the cage and when we put the cage on top of the frames of the brood box, trophallaxis could be seen taking place between the workers and the queen. The workers appeared to have accepted the queen, so we decided to risk introducing this queen into the nuc and keep our fingers crossed for a week. This queen was accepted, was prolific and had gentle daughters.

#### Our Attempts at Queen raising

Our first attempt was in July. We filled about half the Nicot cage with cups. We

left the Nicot cage in the hive for a couple of days to allow the workers to prepare the cells for the queen to lay eggs in. We then put the queen in the nicot cage at the next inspection. 4 days later, we came back and found the following:

There were cups with no eggs/ larvae (we guessed the queen had not laid in these or the bees had cleared the eggs after being laid). There were cups with eggs/ larvae not in the centre.

There were however a number of cups with eggs and <1 day old larvae. These were the ones we used for the next stages of the process.

We placed these cups (possibly 20 or so) onto the modified super frame (b). We then placed this between two frames in the aggressive hive. The hive had 11 frames and plenty of stores and two supers. This yielded about 5-6 queens.

By our second attempt, we were into end of July. This time, we didn't leave the Nicot cage in the nuc to allow the bees to prepare the cells before trapping the queen in it. When we returned on day 4, there were no eggs or larvae in the cups in the Nicot cage.

Our final attempt was in August, and yielded a batch of about 20 virgin queens. I've written up the steps based on the last attempt that led to the successful batch. This will serve as a reminder to us for the 2018 season, and hope it provides some guidance for other people.

Day 1: Inspection of the nuc showed the yellow marked queen was easily seen, and also more importantly that we had eggs – so she was laying well. We carefully put the queen in the Nicot cage which allowed the workers to come in and out but trapped the queen inside so that she would lay eggs in the plastic cups. Hive 1 was made queenless by removal of the queen. The hive had 11 frames of brood, pollen and stores. There were also 2 Supers on the hive.

Day 4: We inspected the Nicot cage and found: Cups with 1-3 day old eggs Cups with 1 day old larvae (only approximately 10) Cups where the eggs were not in the centre. These we rejected. Empty Cups. These we rejected.

For queen rearing, ideally you need less than 1 day old larvae, so we put first the cups with larvae and then the cups with eggs on to the modified super frame (b). This frame was then transferred to the queen less "hive 1". A thorough inspection of the hive was undertaken removing any queen cells that had been started by the bees. This was to ensure that the only queen cells the bees brought along would be the in the cups we had introduced from our Buckfast queen.

Days 4-7: We visited the allotment a couple of times with the sole aim of destroying any emergency cells the bees had tried to draw from their own eggs or larvae. Encouragingly, on our successful attempts, the bees were drawing out the cells that we had introduced.

Days 8-10: we had over 20 sealed queen cells, we put the hair roller cages on them to stop the queens hatching and tearing down the other cells.

In hive 1 – which was both to be requeened and also was the hive where the new queens were being incubated: We put two sealed queen cells in the centre of the hive onto the modified super frame (d) and moved the rest of the queen cells (b) to the outer edge of hive 1 so the queens would hatch safely in the hair roller cages.

Days 16+: Just as the books say at day 16 and onwards the virgin queens were hatching in the hair roller cages.

The queen on the modified super frame (d) in hive 1 had also hatched and almost immediately we noticed an improvement in the temperament of the hive due to the having a new queen.

#### How the Queens have fared

We introduced sealed queen cells to 4 hives in total and had a full acceptance of the resulting queen as she emerged inside the hives (rather than having to be introduced to it). Since the queens emerged, we have noticed the new queens have taken well and are being overwintered at the time of writing this. There has been a dramatic and consistent improvement in the tempers of all the hives into which the new queens have been introduced.

In hindsight, the original problem that we were trying to solve (i.e. aggressive hives) can also be addressed by simply introducing a frame of young larvae from a better tempered hive into the offending hive after dequeening the bad tempered colony and destroying any queen cells drawn on their own brood.

Another alternative would be to make a nuc with the good queen and then combine the nuc with the aggressive hive, after removing the queen from the aggressive hive.

#### Plan for 2018 season and post note

Our experiences in 2017 taught us a lot about queens and will be planning to do more queen rearing in 2018.

Some key pointers/rules we plan to follow based on the experience from the 2017 season are:

Firstly, if we need to requeen an aggressive hive, we would use the simple method of introducing a frame of young larvae from a better behaved hive, as this would be much quicker than rearing a queen for it.

As well as using the Nicot cage method, we plan to try to graft young larvae into the cups. This will add another beekeeping skill of grafting to our skillset.

We will kick all this off much earlier in the season - from May onwards, if the weather's OK.

Ensure to place the queen cells between frames of young brood, ensuring there is plenty of pollen.

Ideally the queen cells need to be reared in a very strong hive, so there are plenty of young nursing bees with active brood food glands to make royal jelly to feed the developing queens.

Ideally the hive should also be strong. We will put the hive into an emergency queen raising mode by removal of the aggressive queen prior to starting our exercise. This should make it more likely that they will naturally want to bring on the queen cells we have introduced.

We have found the experience of learning to rear our own queens incredibly rewarding. It has expanded our beekeeping skillset. This better equips us to be able to promote what we judge to be good characteristics in a queen to other hives. There is also a great satisfaction in knowing that we have played an integral part in selecting and raising the queens that are in our hives. For sure, we are looking forwards to doing it again in the 2018 season!

### **Beginners Course Timetable**



We would like to invite all of our members to join the sessions where you may like a refresher on some of the topics covered on the beginners course, many of our members like to attend the Swarming and Disease lectures for a revisit. It is great to share experiences with new beekeepers and to help in the apiary during visits.

### Session 3 - The Years' Work (part 1)

Date: **10th February 2018** Time: **10:00am – 12:30pm** 

A diary of the years' work from **January to July** in the apiary. This includes local flora which honeybees gather pollen and nectar.

Session 4 - The Years' Work (part 2)

Date: **17th February 2018** Time: **10:00am – 12:30pm** 

A diary of the years' work from July to December in the apiary. This includes a demo of equipment and the preparations needed for colonies in the winter.

### **Session 5 - Middlesex Federation Day**

Date: 24th February 2018 Time: 10:00am - 4:00pm

Middlesex Federation Day, Entrance included with course fee.

### **Session 6 - Bee Tradex**

Date: 3rd March 2018

We will be going to a bee trade show held at Stoneleigh Park in Warwickshire. Those who are interested can purchase the necessary equipment for the practical part of the course. We will be organising a car share for people wishing to attend.

Click Here For More Info

Session 7 - Brood Diseases

Date: 10th March 2018 Time: 10:00am – 12:30pm

The module will look at the brood diseases to be aware of, including what to look for to identify them, the action to be taken and who to contact. The session will also include how to react to bee stings.

### **Session 8 - The Varroa Mite and Adult Bee Diseases**

Date: 17th March 2018 Time: 10:00am – 12:30pm

This module will cover identification, monitoring & control of varroa with the concept of integrated pest management and adult Bee diseases, CBPV and Acarine.

### **Session 9 - Apiary Visit And Handling Bees**

Date: 24th March 2018 Time: 10:00am – 12:30pm

This Module is to teach students how to open a hive, inspect the brood and what to look for, i.e. eggs, lava, capped brood, unripe honey, capped honey, pollen and disease. The module will also look at keeping hive records.

### **Session 10 - Equipment Clean Up And Prep**

Date: 31st March 2018 Time: 10:00am – 12:30pm

Equipment preparation and visit to apiary to check colonies.

### Session 11 - Meet Apis Melifera

Date: 7th April 2018 Time: 10:00am – 12:30pm

This covers from Bee to Colony (individual insect to super-organism). We will discuss the drives of the colony and what makes them a super-organism (with some examples).

### **Session 12 - Swarming And Swarm Control**

Date: 14th April 2018 Time: 10:00am – 12:30pm

This module covers why bees swarm, how to recognise the signs of swarming within the colony and the theory of artificial swarms, splitting colonies and combining colonies.

### **BDBKA News**

# Barnet Beekeepers On Social Media

Like us, Follow us and get keep up to date with association news and events.







On The Lookout For New Sites With the uncertainty of the future of Whalebones site we are on the lookout for new sites for our members.

Even if we can continue using Whalebones as a training apiary for the time being it will not be suitable for hosting bees when any development starts. We are always looking for more suitable sites for Association apiaries. If you do know of sites that are available and could be suitable please get in contact with one of the Association committee members.

# Apiarist Suit Discounts For Our Members

Discounts are available from two of the most popular brands in protective suits for Beekeepers to members of Barnet Beekeepers Association.



Both BB Wear and BJ Sherriff offer discounts.

Please email our <u>Membership Secretary</u> who will confirm your membership with Barnet Beekeepers to the supplier you wish to purchase from.



#### Honey Wanted!

Totterige Horticultural Society are are looking for a beekeeper(s) to sell honey at their Spring Show on the 24th March. If any of you have honey to sell and would be interested please contact <u>Mary Block</u> for more details.

### **Committee Members**

Chair: Pat Morgan Deputy Chair/Bee Disease Officer: Geoff Hood Second Deputy Chair: Wilf Wood Treasurer: Lester Doman Committee Secretary: Ann Songhurst Membership Officer: Mary Block Social Secretary: Linda Perry Publicity Officer/Newsletter: Adam Armstrong Education Coordinator: Lorraine Patel Queen Rearing Programme: Ripal Parekh

### **Association Apiary Managers**

Arkley Apiary Manager: Pat Morgan Cat Hill Apiary Manager: Geoff Beresford Cook Mill Hill Apiary Manager: Lester Doman Shenley Apiary Manager: Steve Leveridge Whalebones Apiary Manager: Wilf Wood Willows Apiary Manager: Geoff Hood