



**THE LEEDS BEEKEEPERS ASSOCIATION  
BRANCH OF THE YBKA  
AFFILIATED WITH THE BBKA**



# *“The Leeds Beekeeper”*

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Well I have half a bushel of stripped straw all ready to skep, whether I manage to come back from the course with a skep or a beer mat we will have to wait and see, but a full write up will feature next month.

A couple of days of mild weather over Christmas gave me the perfect opportunity to treat for Varroa. Both colonies had about four seams of bees and were taking advantage of the mild weather to do a few cleansing flights.

Now as some of you may know I don't number my hives, preferring to alphabetically name the queens instead (how long that is practical for as my number of hives increases we will wait and see.....). Anyway Queen Camilla (A David Haigh queen's daughter), now two (and a half) years' old went to the heather last year and performed excellently. Her daughter Queen Deidre stayed in the back garden and the hive was generally grumpy most of the Summer – not helped by persistent sneaky wax moth. So she is very much on notice this year – good honey yields and a calm disposition – or there will be a job vacancy.....

## CHAIRMAN'S NOTES

I hope your Christmas and New year were everything that you wanted and you got the books or new hive tool from Santa that you asked for.

As I am writing this, the temperature outside is approaching 7 Celsius which is not what it's supposed to be. One of the main jobs in these early weeks of the New Year is to keep checking your colonies for stores. 'Hefting' is the in word now and if your colonies feel light bang some fondant on as this warm spell will mean the bees will eat up their stores quicker than normal. Some beekeepers are tempted to feed honey but unless this is your own honey, this is risky. Some imported honey contains



*Candle production*

spores of American foulbrood and these can readily infect your colony.

If you have not treated your hive yet with an oxalic acid based treatment, well this is the time to do it.

January is a very quiet month for beekeepers but it will give you time to reflect on how you performed last year. The things that went wrong the hive you let swarm the equipment that was missing all can be put right this year. Plan ahead and all will be fine

The annual Christmas dinner was a great success everybody who went thoroughly enjoyed themselves and a big thanks to Val Danson and Dawn Eggleston for organising it. So there's not much else for me to say except to wish you all the very best for the New Year and a happy and rewarding beekeeping year.

*Regards Duncan*

### **MEMBERSHIP RENEWAL 2018**

Membership subscriptions are now overdue so if you haven't renewed yet now is the time! The subscriptions for 2018, following the AGM, are as follows:

Individual membership    £31

Family membership        £36

Associate membership    £12

We use the online system Webcollect for renewals. Payment can be made, through Webcollect, by Paypal or cheque.

Participants on the 2017/18 Winter Course do not need to pay anything as their membership for 2018 is included in their course fee.

Any questions please contact Kylie, ([membership@leedsbeekeepers.org.uk](mailto:membership@leedsbeekeepers.org.uk))

### **SPRING CONFERENCE**

The YBKA Spring conference will be held at Manor academy in York on Saturday 24<sup>th</sup> March 2018. The cost is £20 for the day if you require lunch and £10 if you bring sandwiches. Please see the attached [flyer](#) for more details and [booking form](#) for those who wish to attend. LBKA's very own Dr. John Varker will be speaking on the Evolutionary History of Bees.

## TRAVELLING SALESBEEES



*Which is the quickest way home for my tea?*  
© Joseph Woodgate

Researchers from Queen Mary University set up five artificial flowers and used harmonic radar tracking to study bumblebee navigation between the flowers. Previous research has looked at the length of bees' flights and where they land, where as in this case the researchers were able to monitor continuously. From this work they were able to establish that the bees were solving their own version of the travelling salesman problem. The fastest most efficient route for travelling from point X to point Y via point Z is not always the most direct route. To investigate this the team set up five artificial flowers which offered the bees a sweet nectar treat when they landed on them. Scientists then tracked the bumblebees over two days to study the paths that evolved and the routes the bees took.

Humans are creatures of habit and it would seem that bumblebees are no different, quickly establishing flight paths to enable them to visit all the forage available and following the same route between the five flowers reducing exploration time. However, over time they optimised the route between flowers reducing the time taken (the human equivalent of taking the M1 rather than the A1) and establishing somewhat of a favourite sequence. The bees were however not completely set in their ways and would sometimes modify their routes; this could be due to a factor such as a change in wind direction.

<https://www.nature.com/articles/s41598-017-17553-1>

## BULK HONEY AVAILABLE

Roll up, roll up! LBKA have approximately 100 lb of Summer honey available to buy in bulk at a cost of £3 per lb, ready to be put into jars. If anyone is interested in this, please speak to Duncan or David in the shop.

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*A pound of honey is a lifetimes work for 768 bees, involving visits to two million flowers*

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## JANUARY APIARY DAY

The first Apiary day of 2018 was a very busy and productive one. We had a great turnout of members who popped down to help David and Duncan restock the stores. At one point there were over twenty people lifting, carrying and shifting beekeeping resources from the hire van into the container. A big thank you to all who contributed as they say 'many hands make light work'.

*Michelle Priestley*

## NEW YEAR – NEW WEBSITE

For those of you who haven't visited our website yet this year it has had a bit of a festive makeover. Many thanks to Dave Cook for his efforts.

## BEES ON THE BOX

Meanwhile on Netflix, there is a new series called "Rotten", the first episode of which "Lawyers, Guns and Honey" looks at the American honey market.

## HONEY WI SUMMAT IN IT

Now for those honey purists out there, now is perhaps the time to skip a page – why ever would a jar of the amber nectar need anything adding to it? But perhaps your latest honey harvest is a little bland and needs a little something extra? In the final part of our honey series we look at alternative ingredients that can be added to honey to give an interesting/unique/different\* (please delete as appropriate) taste.

There are very much two schools of thought when it comes to infusing honey; dry or wet. Due to the low moisture content of honey (typically <20%) it does not support the development of microbes or mould and thus by adding dry ingredients, this delicate balance is not disturbed. Subsequently you will find plenty of people who advocate adding only dry ingredients to honey. There is then a second group who will quite happily add wet ingredients to honey, accepting that the resultant honey may have a shorter shelf life and/or require refrigeration.



*"To me, to you"*



*"I ho, I ho, its down to the apiary we go!"*



*'What will you infuse in your honey?*

great for salmon and chicken recipes. Or what about espresso honey made by infusing roast coffee beans with your honey?

Looking for something with a bit of citrus zing? Then infuse your honey with slices of oranges or lemons, but note as the juice and oils are pulled out of the fruit slices your honey will become runnier and this is definitely one that will need to go in the fridge, unless you want a mould mess?

So there is some food for thought next time you have a batch of bland honey..... go create!

## **BEES LOOKING FOR A BUZZ**

"I found this on an electrical website, with no further comment. From an electrical point of view, though, the bees are not far from causing an electrical fire, and given the flammability of wax (and bees!), the result would have been spectacular."

*John Duffy*



*An interesting place to call home.....*

## WINTER VARROA TREATMENT



*Winter Cluster*

Well, it's the time for us all to apply the Winter treatment against Varroa, in fact by now you will hopefully have done it - oxalic acid based of course. We are told to treat between Christmas and the New Year. An alternative group advocate applying on or around the Winter Solstice (when the days start to lengthen and the queen recommences laying) - this year it's on 21 December.

But it was a nice day today (18 Dec) - 7 degrees and sunny - and the bees had broken cluster for "cleansing flights". So off I went.

It's a relatively quick job. Less than 30 seconds each colony. Remove the roof and crown board. If you can see the bees, then you apply 5 ml per seam of bees (a seam is a strip of bees between two frames). Mine are on double brood boxes for winter and the bees are usually either in the bottom box or between the two boxes. In this case it's simply a case of splitting the two brood boxes and "hinging" the two to expose the bees. Having applied the treatment you just reassemble the hive ASAP, "before the bees have time to blink".

Having done this for a good number of years, it never ceases to surprise me that the colonies are in such different strengths. They all went into Winter at about the same strength. All were left with 45lb of honey. Yet some are really strong and others pretty weak. The pictures below serve to demonstrate. One is covering 5 seams, the neighbouring hive just 2 (at best).



*Quick hide!*

The risks for these two colonies are a) the strong one might use up all its food and starve and b) the weak one might not have enough bees to effectively cluster when it gets really cold and die of cold. I'd much rather have colonies at this time of year somewhere in between these two. Fortunately, most were in this "in between" state. A respected former LBKA member Harry Granger, who was also President of BBKA, advocated just letting these "extremes" of colonies simply die. He argued that if they can't survive winter on 45lb of Honey, or died because they were too weak, then they really shouldn't survive. Let nature take its course. You'll doubtless have your own views.

I'll have to wait and see. I was pleased that all mine are still alive at this stage. I'll not though be taking any intensive interventions. No fondant. I'll simply make sure that they're all upright and watertight. Those that survive, survive. Others will die- hopefully no more than 10%.

My next beekeeping tasks won't occur until early February. I'll then

a) Remove the mouse guards and replace them with entrance blocks. I'm no longer on open mesh floors, having gone back to solid floors. I reckon that inserting entrance blocks at this time warms up the colonies - just by an odd degree or two - and this encourages queens to lay a few more eggs and

b) I'm trying (for the first time) applying pollen patties and these will be going on on a nice warm day towards the end of the month.

I might be misguided - but it keeps me out of mischief.

*Dave Barrett*

## OREGANO OIL TO COMBAT VARROA?



*A potential varroa treatment?*

At a time when most beekeepers will be spoiling their bees with some form of oxalic acid based treatment in order to keep varroa under control a group of researchers from Canada and the Middle east have been investigating alternative treatments.

Varroa is of course an ectoparasitic mite and a range of chemical (oxalic acid, formic acid, thymol) and physical (icing sugar, bee gyms, drone brood) treatments exist to help in the control of varroa. The researchers used three different varroa treatment methods over a fourweek period; Oxalic acid in a sugar solution impregnated into

cardboard, oregano and clove oils in an ethanol- gelatin solution applied to absorbant pads and oregano oil delivered using electric vaporizers. It was found that using the electric vaporising method, most mites were killed within the first two weeks of the four-week study compared to the last two weeks for the other treatments and demonstrate the importance of continually releasing miticides in the treatment of varroa.

It is perhaps not surprising that oregano oil has an effect on varroa numbers as one of the major constituents is the oxygenated monoterpene thymol.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5547185/>

## MINI NUCS – NOVEMBER MEETING

The return of Gerry Collins after last year's talk on wax moth saw a busy Winter meeting in November as this time he came to speak on mini nucs, particularly Apidea. So I guess the first question is why use mini nucs? Well the idea is that the small size of them means you can raise queens without a loss in honey production due to the small number of bees required for each ("A good scoop").



*Standard Apidea kit*

Apidea is a particular make of mini nuc made from polystyrene but there are a range of others such as Swi Bine, BiVo and Warnholz, regardless of the make the principles are still the same. A mini nuc can be used 3 or 4 times per season making it an effective way to have a go at queen rearing. However due to the small numbers of bees used, mini-nucs are highly sensitive to conditions – and if the bees aren't happy they will be off, so you need to pay them more attention to reduce the chance of absconding.

So you have your mini-nuc, next you need 300 ml of bees (young bees only). To get your young bees, who are going to eventually nurse the resultant larvae, you can either "soft shake", get house bees from a super, or perform a demeree. Next you need a day 12 queen which can be added via a convenient little hole in the top. Place the mini-nuc into a cool dark place (garage?) for 3 days with twice daily mistings. Alternatively, a virgin queen can be dropped in with the bees, however during the second use a virgin would need a proper "introduction". When the queen goes off for her mating flight the remaining bees will be out around the mini-nuc entrance, Nasonov fanning. Once the queen returns successfully mated, she will soon begin laying. Once a good sealed brood pattern is observed in the mini-nuc, it is time for her to move to pastures (frames?) new! Take the queen out one day and add a new queen cell the next.

At the end of the season all the mini frames can be united in a WBC super to be cleaned up and then placed in a freezer to kill any wax moth (I knew he would mention them at some point!).

However, it isn't always perfect, sometimes the queen cells aren't accepted, there is the issue of absconding, queens can end up not properly mated, or even lost in flight. If the queen is lost then a laying worker will appear very quickly! Another thing to note is that if an Apidea makes an emergency queen cell then a scrub queen tends to be formed – either small in size or made from old larvae. Mini nucs can be particularly vulnerable to wax moths or wasps (particularly if feeding syrup).

So hopefully Gerry has inspired you to have a go at Queen rearing?

## TEMPLE NEWSAM BEES

I've just taken on the role of colony manager and with Nicholas Holmes (my volunteer helper) we took the opportunity of the January apiary day to apply the oxalic acid Varroa Treatment.

All the colonies have been put into winter on at least double brood boxes (and an odd one on double + super). As you'd expect, the bees are to be found in a variety of places, some in the bottom box, some the top and (yes you've guessed it) some straddling the two. We applied the oxalic acid in liquid form via a spray. One "squirt" = 1 ml - so we had to give five squirts per seam of bees. As most of the colonies needed the boxes splitting to find the bees it was good to have two pairs of hands.

The colonies were mostly in good heart. All eight were alive - though two were pretty small. All but perhaps one had plenty of food. It will be interesting to see how many get through winter to form colonies for this year's courses.

We found a fundamental mistake on one colony. This had a double brood box with bees in the upper chamber. Bees at the top of a double brood box at this time of year can indicate that they've no food in the bottom box (we didn't check - too cold and pretty pointless). However, there was a queen excluder and full super above that top brood box. This was a potentially fatal scenario for the poor bees. Workers could get to the food/ honey but the poor queen couldn't and would become separated and die of cold or starvation. We simply removed the queen excluder.

This done we moved three colonies to new positions to give us more room to manoeuvre during the active season. It's interesting that if you move colonies in winter the rule of "three feet or three miles" doesn't apply. They must lose memory of the hive location during winter and re-orient themselves each time they come out for a cleansing flight/water gathering expedition.

Incidentally I don't subscribe to this 3 feet/miles rule myself. The three feet element is correct. But I've disproved the three mile bit. My home is just over one mile from each of two of my out apiaries. I have moved colonies from home to these apiaries (when my wife's protests at me slipping an odd swarm into a hive at home became "irresistible") and have never had bees returning to their old site at home. Perhaps I've just been lucky... But it pays not to always take all of these "old rules" for granted.

I'll bet that upon first inspection in April some colonies will have died and others will be in need of food. As we won't know for certain why they've died it'd be prudent to sterilise the frames with 80% acetic acid for a week before recycling their unused food supplies to those in need of a top up.

Incidentally there was no evidence of nosema on frames/hive fronts - so that's good to note.

Finally Nicholas hasn't yet got his bees. He lives in Horsforth and is looking for an apiary. An established Beekeeper in that area has already "bagged" the places he's tried. If any of you can help I'm sure that he'd be grateful.

*Dave Barrett*

## NATIONAL HONEY MONITORING SCHEME

Following the recent study indicating contamination of honey with neonicotinoids a new initiative is to be launched in 2018 called the National Honey Monitoring Scheme, designed to provide an early warning system to environmental threats affecting honeybees.

What the monitoring scheme will aim to do:

- State-of-the-art analysis - DNA metabarcoding & high precision mass spectrometry of honey samples
- Sample archive - for future research developing new analytics, such as disease detection
- Provide feedback to participating beekeepers
- Generate robust scientific data to inform future policy decisions

If you are interested in this you can register your interest by emailing [honey@ceh.ac.uk](mailto:honey@ceh.ac.uk)

## JANUARY MEETING - COOKING WITH HONEY

Wednesday 31<sup>st</sup> January sees a new event for LBKA – something we haven't tried before; Cooking with Honey. The idea is that members bring along a sample of their favourite recipe, sweet or savoury, containing honey, for other members to taste. If you wish you can also bring along a copy of the recipe used to create the dish (assuming it isn't a secret recipe passed down through the generations). Mary Berry will not be coming along to judge so it doesn't matter if you have a soggy bottom. There will also be mead tasting on the night so make sure you book your place on Webcollect asap!

Event starts at 7pm, but if you are bringing a tasty treat with you, please arrive at 6.45 pm so you will have chance to plate it up.

If anyone has any honey that they wish to bring for sale then tables for this can also be arranged providing tasters are available. Likewise, if you have any other hive products to sell such as creams and lotions please bring these along together with testers for members to try out your products. The usual policy is that a donation of 10% of your sales income is given to LBKA. You should ensure that all your products are properly labelled.



*What tasty treat will you be bringing?*

## Ask The Beekeeper

Have you got a burning beekeeping question that you want an answer to? Then please send it to [editor@leedsbeekeeper.org.uk](mailto:editor@leedsbeekeeper.org.uk) and we will do our best to find you an answer!

## Correction

In the December issue's "Ask the beekeeper", it should of course have been the river Aire that runs through Leeds.

## 12OZ HEXAGONAL JARS

Hopefully your bees have been busy and you now have lots of honey and not enough jars to put it in.... fear not LBKA have the answer! 12oz (340 g) hexagonal jars with lids are available in the shop at a bargain price of 23p each, they come loose so you can buy as many as you require. Please bring a cardboard box to carry them home in. If you require a large quantity, please email Duncan [thebeeman@hotmail.co.uk](mailto:thebeeman@hotmail.co.uk) or ring him on 07855 308143

Got an article for the next edition? Please email to [editor@leedsbeekeeper.org.uk](mailto:editor@leedsbeekeeper.org.uk) by 31<sup>st</sup> January.

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## FORTHCOMING EVENTS

### January

Saturday 13th - Apiary Day – 10.00 a.m. – 12.00 noon

Wednesday 31st – Cooking with Honey – Members share samples and recipes.

### February

Saturday 10th - Apiary Day – 10.00 a.m. – 12.00 noon

Wednesday 28th – Winter talk – Dr Sophie Everson – Trouble shooting in queen rearing and recent advances in chalkbrood research.