



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



# *“The Leeds Beekeeper”*

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*A bloom at last!!!...*

Like all good trilogies, the third part is usually a bit of a damp squib and that seems to have proved true with the Beast from the East part III. Plenty of rain at home but none of the white stuff, but a damp Easter meant I could make a start on knocking up some nucs ready for the season. It is quite interesting (and especially after our recent Winter talk on pollen) to have five minutes in the garden with a brew and see the range of colours of pollen brought back by the foragers – obviously that only works if your bees are in your garden – but if not take a flask!

## CHAIRMAN’S NOTES

With the official start of Spring and the beginning of summertime things within the apiary should be bursting into activity. On warmer days the bees should be flying freely some returning laden with pollen and others with nectar. Now is the time that we can undertake the first full inspection of the season, the temperature for this manipulation should be in the region of 17 degrees warm enough for us to wear just short sleeves.

Have all the equipment you will need to hand the essentials are your smoker with fuel, hive tool, clean bee suit boots and gloves.

It is said that there are two things in beekeeping that are the most difficult; one is keeping the smoker alight and the other is finding the Queen. For most new beekeepers this is probably true, where I do give advice to them, it will be even if you have only a small number of colonies do not buy a small smoker rather invest in one of a size that will hold sufficient fuel to smoulder away while you complete your inspections - these smokers can be obtained from the apiary shop.

This is a busy time of year for bees the increasing number of new workers will relieve the pressure on the surviving winter bees and the Queen will respond to the increase in pollen and nectar

by laying at a greater rate assuming that there will be enough fine weather for plants and bees to follow their usual development. So our function is to work with the bees to help this natural growth and particularly to do our best to control the swarming impulse which may give us more stocks but will also give a reduced honey crop.

There are five main things to look for in this first inspection the most important one in my opinion is there a laying Queen? are there eggs and larvae in different stages? All signs that the colony is Queen right. Now that the colony is at its lowest in terms of numbers of bees, this is the ideal time to find the Queen and mark her because believe me a marked Queen is far easier to find than an unmarked Queen later in the season! 2nd is the brood pattern good; is the queen laying in an even pattern? 3rd are there enough stores until the next inspection 4th is there enough space for the Queen to expand the hive and finally is that any sign of disease? Always work systematically through the hive holding the frames in the correct way and make sure that your smoker is always lit.

So until next time happy beekeeping.

*Regards*

*Duncan Brearley*

## **WHO NEEDS A TV?**

Have you ever thought there isn't much on the telly tonight, I wish there was something else we could watch? Well have no fear we have just the answer; your very own living room bee hive! A company called BeeCosystem have developed a modular system called HexHive designed to be wall mounted and to bring the joys of beekeeping direct to your living room. Each hexagonal unit is see through so you can watch the bees going about their bee business from the comfort of your armchair. Should your bees start to run out of space just bolt on an additional HexHive to the side of your existing hive!



*Do your bees like a bit of Balsam*

So, if you have a spare £450 burning a hole in your pocket..... *Oh and this isn't a late April Fool's*

<https://beecosystem.buzz/>

## THE BUZZ PROJECT



*Beehive project at Standedge Visitor Centre*

Featured on a recent edition of Countryfile, The Buzz Project is the brainchild of Dr Ryad Alsous working in association with Sanctuary Kirklees. Dr Alsous fled the war in Syria in 2014, leaving behind over 500 bee hives and a career in Food Science and Technology.

The idea behind the project is to bring refugees and local people together through the medium of beekeeping. It potentially offers people the opportunity to feel productive again by allowing them to draw on their own professional backgrounds and to feel that they are once more making a useful contribution to their community.

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*"Many in this situation have had high level careers and so have an enormous amount to offer and contribute. This opportunity allows them to make a useful contribution and gain skills and expertise that will help them to fully integrate into the community." Dr Ryad Alsous*

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The project currently has around ten hives along with workshop space, meeting facilities and space for honey extraction on land owned by the Waterways trust near to Standedge Tunnel visitor centre in the Kirklees area.

For a link to the Countryfile episode please see below

<https://www.bbc.co.uk/programmes/b09yngmx>

<https://canalrivertrust.org.uk/news-and-views/news/new-refugee-bee-hive-project-the-buzz-project-launched-at-standedge-visitor-centre>

## NON-NATIVE SPECIES

Bee Craft is planning to write an article about non-native 'invasive' species of plant that bother some naturalists but which can be of benefit to our bees. In particular, they would like to hear from you if large quantities of Himalayan balsam grow in your area. If you feel your bees benefit from this flower, and especially if you get a crop of honey from it, deputy editor Richard Rickitt would like to hear from you. You can contact him at [richard@bee-craft.com](mailto:richard@bee-craft.com).



*Do your bees like a bit of Balsam*

## LINCOLN BKA ANNUAL AUCTION



*Make a few candles out of one of those.....*

the winter. That's because it's the first auction of the year and usually has plenty of bees for sale. If prices are high then it's been a bad winter for bees as beekeepers are keen to replace their dead stocks. This year there were about 45 colonies for sale. About 1/3 were in poly nucs - most were reasonably strong with just a couple noticeably weaker. The rest were in Nationals (with an odd 14x12). Lots of these were complete hives - stands, brood or brood and a half with queen excluder super, crown and roof. Now here's an odd thing. It didn't seem to matter whether it was in a polynuc or a full National with super, they all went for about £150. The bees in some hives (in auction as the beekeeper had had a stroke) were much stronger than those in the polynucs - yet the price remained at about this "£150 benchmark". It really doesn't make sense. The full hives were MUCH better value. The only thing I could conclude was that it was easy to take a polynuc home (just tuck it under your arm!) whereas you'd have to put the seats down in a hatchback etc to get the hives in. So, based on these prices, it looks like the bees have overall done pretty well this winter.

I'd gone down with Chris Barlow who'd taken some bees and other bits and pieces to sell. He was happy with the prices he got for the bees (though more would have been better). He also bought a smashing, brand new, cedar observation nuc for £150 (about 1/3 of retail I think).

This is reckoned to be one of the largest beekeeping auctions in the country and, this year, it pretty much lived up to that claim. It had over 650 individual lots. These ranged from the bizarre (a sheep's fleece....) to the unusual (a clear Perspex settling tank). Surprisingly about half of the items were brand new. Dozens of Twin hive stands, roofs, brood and super boxes. I bagged a few new crown boards at £5 which I thought was pretty good. There was a new cedar WBC which went for a bargain price (if you wanted one of these). The 15lb blocks of wax (see picture) went for £3 a pound which was about right and the new smoker (shown) sold for £12 which again was a fair price. Other than these you had the odd bargain, quite a lot of people getting carried away and paying more for second hand than they could new, but mostly the sales were such that both buyer and seller would be content.



*£12 a fair price for a smoker?*

But Lincoln is also judged to be a good determinant of how bees have survived

The most popular area though was the tea/coffee stand which was also doing a roaring trade in bacon or sausage butties, burgers and a huge array of homemade cakes. And it had seats! Standing up at these auctions gets a bit tiring after 6 hours.

Overall it was a good day out.

And finally, as we were leaving I spotted this sign on the back of a van which amused me.

*Dave Barrett*



*You don't need to be Usain Bolt...  
Just make sure you're not the  
slowest.....*

## SWARMS

As the weather begins to improve and Spring is in full swing, thoughts begin to turn to swarms and once again I am asking you to step up to the mark to help in this very busy and important time. The only way we can collect swarms within the local area is with your help. For the uninitiated this is how it works:



*Can you catch a swarm?*

I will contact you with all the information as to where it is, postcodes, etc, you then pick a time convenient for you to collect and then you go and retrieve it. I will have sorted the donation of £30.00 before you go, of which you get £10.00 for your out of pocket expenses, the remaining £20.00 goes to LBKA and of course you keep the bees so really it is a no brainer. All you need to do is e-mail [thebeeman@hotmail.co.uk](mailto:thebeeman@hotmail.co.uk) with your contact phone number and the postcode(s) you wish to collect from and I will do the rest.

The one rule I have is that you must have kept bees for at least 12 months. If you have never collected a swarm before don't worry as I will get an experienced beekeeper to show you and make sure the swarm is easy and accessible (No cherry pickers required).

Looking forward to hearing from all of you.

*Duncan Brearley – Swarm Coordinator*

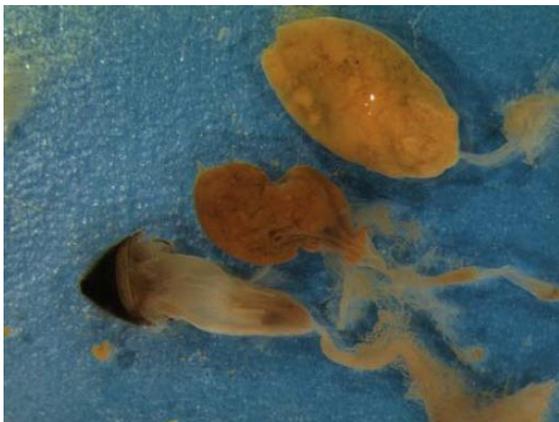
## TO DIGEST OR NOT TO DIGEST THAT IS THE QUESTION

I am sure you have seen people refer to honey as bee vomit but nothing could be further from the truth. Now if you have just sat down with a cuppa and a biscuit skip straight to paragraph two, for the rest; vomiting is involuntary and forceful expulsion of stomach contents usually associated with illness or poisoning and not to be confused with regurgitation; indeed, where would baby birds be without it? Thus bees regurgitate their precious nectar to be made into honey.

Formed by invaginations in the developing bee, the digestive tract of a bee is composed of three distinct regions; the foregut (mouth, oesophagus, and crop), the midgut (proventriculus, ventriculus and ileum) and hindgut (rectum and anus). The foregut and hindgut possess the same cuticular lining as the external surface of the bee and thus nutritional absorption is not possible in these areas.

Nectar is retrieved by the honeybee from its flower of choice, passing down the oesophagus, into the honey stomach, or crop, for storage on the journey back to the hive. The crop can also be used to store water or indeed honey depending on the duties of the bee or the tasks to be completed. The bee has two options for its crop full of nectar; the bee can regurgitate the nectar, passing it to a hive bee for storage or use within the hive. Or some of the nectar can pass through the proventriculus (a one-way valve) into the ventriculus, or digesting stomach. At this point the bee can digest the nectar to extract beneficial nutrients. The proventriculus in addition to preventing “back flow” also filters and grinds food particles (such as pollen) removing them from the crop.

The ventriculus is lined with epithelial cells which detach, releasing enzymes enabling the digestion of the bees’ lunch. Peristalsis moves the stomach’s contents into the ileum, where the convoluted walls increase surface area to aid nutritional absorption. At this stage the Malpighian tubules connect to the



*Bee rectum, empty, half full and full © Michael Andree*

small intestine. Bees are able to reabsorb >90% of the water used by the Malpighian



*Ventriculus, small intestine, and malpighian tubules of Apis Mellifera © Michael Andree*

tubules via rectal pads resulting in moderately liquid to dry faeces. During the Winter time bees do not leave the hive and thus must store their faeces for a number of months before release leading to enlarging of the rectum. Thus on the first sunny day in Spring – the one when you decide to put out your washing for the first time..... well that is the day the bees decide to venture out to relieve themselves.....

## TOPICAL TIPS — APRIL

Ordinarily April would see the start of things. The colonies would be increasing in strength, drones starting to appear, spring flowers out and everything enjoying the sunshine. But not this year. It's been cold. Snow and frosts. And so much rain that the ground is saturated. As I write this (4th April) there are no spring flowers save crocus and the start of blackthorn. Good job really as the bees can't get out of the hives as it's either cold or raining or both!

So the best tip I can give, certainly until it gets warmer, is to leave them alone.

On my own hives I've been experimenting and have placed pollen patties over the brood nests. I had 20% losses, half due to nosema and the rest for unknown reasons (they had plenty of honey and had dry hives). These have all been sterilised using 80% Acetic acid and the hives sealed to prevent robbing. Once I've removed any poor combs these, now sterilised, hives can be put to good use when creating nucs or housing swarms etc.

On the assumption that it does warm up, then on the **FIRST INSPECTION**:-

Is the queen laying? No real need to see the queen, just the presence of brood tells you that she's there. Is that brood worker brood? Sometimes queens fail during winter - they run out of sperm due to poor mating - and become drone layers. They are still heading up the colony, giving out pheromones, so the bees are content that they're "queen right", but she can only lay drone brood. The evidence is the raised/ domed appearance of capped drone brood laid in worker cells. Ask if you find this and don't know what to do - though the outcomes are typically bleak.

Have they plenty of food? The brood nests are expanding rapidly and those larvae need feeding. Colonies can burn up considerable amounts of honey in the process. Of course there should be stores and incoming nectar from the spring plants. But if you're concerned either a) take honey frames from those with plenty and give to the needy or b) feed - syrup is ok now and preferred to fondant.

Is there any evidence of nosema? This is "spotting" or streaks of brown faecal matter within the hive / on the frames or on the front of the hive. If so you'll need to plan to deal with it - get the bees on clean comb. Again ask if you don't know what to do. The solutions are either Bailey comb exchange or shook swarm. Any nosema infected colonies are sick and likely to be pretty weak.

Remove any old or damaged comb. Hopefully you'll have identified last Autumn and moved these combs to the outer edge. They should be empty of brood and easy to swap for clean drawn comb or foundation.

Identify which colonies are strongest as these are likely to be the first to want to swarm. I skip inspections on the weaker ones as there's just no need for weekly inspections on these until they've built up.

If the bees have over wintered on double brood or brood and a half, and you want single brood management, then now is a good time to remove the second box / re arrange frames

### **SUBSEQUENT EARLY INSPECTIONS**

Find and mark the queen if necessary. This is the best time of year to do this as there are fewer bees around so spotting her is easier. But if she was already marked, last year, why is she not marked now? I know that all my queens were marked in Aug/ Sept so start by looking for marked queens. Only if I don't then see her do I go through the combs again, but this time searching for an unmarked queen. Sometimes though the paint rubs off and, whilst there, isn't that obvious. Other times though the bees have superseded the queen late in the year and she's not been marked at all. I also clip all queens, though that's not universal amongst beekeepers.

Start looking for swarm cells. First thing though is to keep an eye out for drone cells and drones. There'll be no swarm preparations until the stronger colonies have not only produced drones but those drones have become sexually mature. Drones take 24 days from egg to emergence and another 14 days to mature. So no mature drones = no swarm cells.

Add a super if things are filling up in the brood nests.

Don't forget that the weekly gatherings on Wednesdays (18:30) at the apiary have started. If you have any concerns about your bees or are unsure about what to do / what you've found, then there are plenty of beekeepers there to advise.

Happy Beekeeping

*Dave Barrett*

### **A NEW WEAPON IN THE VARROA FIGHT?**

Lithium chloride? For bees? When most people think of lithium chloride they will immediately think of its use in the treatment of people suffering from bipolar disorder. However, researchers have made somewhat of a serendipitous discovery that could, in time, lead to its use by beekeepers.

It is no secret that over time varroa adapt and evolve their defence mechanisms such that the beekeeper needs to be one step ahead and an integrated pest management approach prevents reliance on one particular weapon in the varroa treatment toolbox.

The interesting aspect of lithium chloride is that the researchers delivered it via sugar syrup and this offers a different mechanism of application compared to other approved treatments. What isn't clear at this stage and will need more investigation before lithium chloride can become a medicinal product is how the allocation of roles within the hive affect the dosage of lithium chloride received by each bee. For example, is a house bee in charge of nectar storage going to be exposed to a higher, maybe fatal, dose compared to a propolis hunting bee who doesn't imbibe any of the laced sugar syrup. *Not that it can be suggested that trickling 5ml per seam of bees leads to equal dosage per bee!*

<https://www.nature.com/articles/s41598-017-19137-5>

## THE FINGERPRINT OF HONEY

Well after the snow at the end of February leading to the cancellation of February's winter meeting (Hopefully Sophie will come and talk to LBKA during the Winter 2018/19 talks season) it was the turn of John Chandler to bring this year's Winter talk season to an end with a talk on melissopalynology or in other words "pollen in honey".

What was obvious from the start of his talk was the diverse range of shapes and sizes of pollen within the natural world. It also became evident that the pollen microscopist needed a great deal of patience and skill in order to identify what was in honey samples. John talked about the other "items" you may not expect to see in honey – volcanic ash anyone?



*SEM image of Salix exigua - Narrowleaf willow*

The melissopalynologist is often called upon when it comes to the origin of honey. Sidr honey from Yemen, which actually makes Manuka honey look cheap, currently sells at around £100 per pound, so it is fairly obvious why the fraudster may want to imitate such honeys. Another aspect is the non-linear relationship between the amount of pollen produced by a plant relative to the amount of nectar – some plants e.g. lavender produce relatively little pollen and thus when studying lavender honey, the microscopist would not expect to see a great quantity even in a genuine sample.

If John's talk inspired you and you wish to develop your microscopy skills then YBKA do run a course yearly and a couple of LBKA members have taken part in recent years. Contact the education secretary ([education@leedsbeekeepers.org.uk](mailto:education@leedsbeekeepers.org.uk)) for more details.

## A WILD TIME IN THE KIRKSTALL ABBEY CLOISTERS

On Saturday 7th April Leeds Beekeepers Association joined several other organisations in bringing nature to the city in the cloisters of Kirkstall Abbey at the 'Nidderdale in the City' event. LBKA were joined by Yorkshire Wildlife Trust, Edible Leeds, Upper Nidderdale Moorland Group, Willow weavers, Yorkshire Dales River Trust and various additional natural history associated groups. Other activities on display included a climbing wall, stone sculpture, dry stone walling, felt making, birds of prey handling and wild food foraging - all this with the background entertainment of an invigorating brass band.

Leeds Beekeepers used the cut-away hive and an observation hive to educate the public regarding bees and beekeeping; in addition, items of beekeeping equipment were on display and candle-making with beeswax was a major attraction for children alongside the competition of the neighbouring llama trekkers pen and the imitation cow with its milking stool.

After a very wet morning the afternoon weather improved bringing in the crowds on the last weekend of the school holidays.

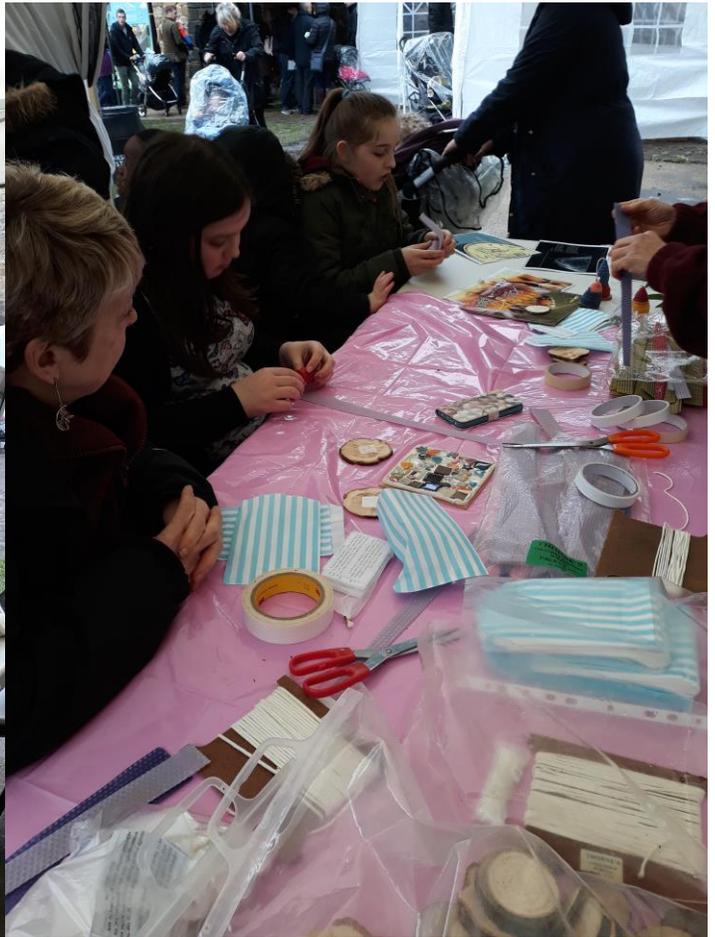
Thanks go to Andy Gowdy, Olivia Lynan, Alison Elgie-Heaton, Helen Lowry, Katey Slater, Kylie Hukin, Aileen Laing and Cath Graham for making the event a success for LBKA. Andy deserves special thanks for spending most of the day alongside his observation hive informing everyone of the laying capabilities of Queen Priscilla and the endless task of her princesses - his sore throat at the end of the day was calmed by a well-deserved strawberry ice cream.

Judging by the success of the day we'll no doubt be invited back again next year so keep an eye out for the request for volunteers next Spring if you'd like to join in the fun.

<https://www.yorkshireeveningpost.co.uk/news/families-in-leeds-enjoy-a-taste-of-the-country-life-1-9104077>

*Cath Graham*





## DAHNT'APIARY

It is still early days in the LBKA apiary at Temple Newsam and the weather definitely hasn't helped.

### **Monday 26 March :**

In a pretty waterlogged apiary the new blackboards were installed. These will be used as a more visible form (for both beekeepers and public) of hive records. Colony detail and aims for next inspection will be logged.

We had a quick look in the top of the eight hives to see which had survived winter. Of the eight, four were judged to be strong and three weak. One colony had died and the hive/ combs sterilised with pads of acetic acid. The colonies had numbered tags placed on the outsides of the brood boxes

### **Wednesday 4 April :**

The acetic acid pads on the dead hive had been on a week and their job done. They were removed and bagged. One of the weak colonies was moved adjacent to the observation hive ready to take up occupation later in the year (May/ June). Pollen patties were laid on the brood frames - an experiment to see if these have a positive effect on colony build up....

The Master classes started with Chris Barlow doing a practical demonstration of the Pagden method of swarm control, in addition he explained how any additional queen cells can be used to raise nucs. Attendees huddled under the gazebo to stay dry as the showers started.

18th April, 25th April and 2nd May - Winter course practicals will be taking place hence there'll be lots of members going into the apiary to undertake their first hive inspections. If anyone can assist on 2nd May please contact Cath : [malcath@btinternet.com](mailto:malcath@btinternet.com)

*Dave Barrett*

## Ask The Beekeeper

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

## 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@leedsbeekeepers.org.uk](mailto:editor@leedsbeekeepers.org.uk) by 30th April

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## FORTHCOMING EVENTS

### April

Wednesday 4th April – Apiary meetings restart

Wednesday 11th April – Masterclass – Apiary Hygiene – Andy Goudy

Saturday 14th - Apiary Day – 10.00 a.m. – 12.00 noon

Sunday 29th – Beverley Beekeepers Auction - Viewing from 10:30 am, Auction begins at 11:00 am

### May

Saturday 12th - Apiary Day – 10.00 a.m. – 12.00 noon