

## The London Beekeepers' Association

# LBKA News

## March, 2022

After the strong winds last month (leaving a trail of fallen-over beehives and other things in its wake) spring is coming! Swarming season starts in a month or so, so come to our monthly meeting to recap swarm control and be ahead of the game, in what we hope will be our last online meeting.

We still have two Winter Lectures to go, with the next one in around two week's time (p4). Thanks to Martin (and as promised) we have a summary of Torben's most recent talk (p11 which you can watch on our website. Do also see this month's announcements, including a reminder of LBKA's Pollinator Fund (p4), a call for help for School Food Matters, a talk about creating wild-flower meadows, free second-hand equipment, BBKA training course and an auction.

Thanks to Martin, Richard and Howard for their articles and thanks for all those who have helped provide content. We want this newsletter to reflect our members, so please do add your perspective.

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Thank you to this month's contributors: Lucie Chaumeton, Richard Glassborow, Geoff Hood, Martin Hudson, George Kozobolis, Annie McGough, Eugene McConville, Howard Nichols, Pip O'Byrne, Mark Patterson, Issay Rodriguez and Simon Saville. Would you like to join these esteemed contributors? If so, contact me.

Aidan Slingsby, Editor, services@lbka.org.uk

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## From our Chair

Richard Glassborow chair@lbka.org.uk

I am afraid I am unable to write more than a very short "from the chair" column this month. Pressure of work, LBKA business, and an imminent home move have all converged on the same singular point on my spacetime continuum and somethings had to give. I am sorry this was one of them.

But I am going to place one or two raw topics into the back of your minds. We will explore them later, I believe they are going to be important to the LBKA.

Firstly, there are signs that the narrative we are trying to promote about the bee situation and the over-hiving of some parts of London does seem to be gaining traction. I am not saying solely because of us, but we are part of



"A busy honey bee takes advantage of the chilly February sunshine and flies frantically in the crispy blossom of a wild plum tree. It did not take her long to collect a reasonable load of bright golden yellow pollen and delicious fragrant nectar." Photo and caption: George Kozobolis.



"I have just seen my first Hairy footed flower bee (male) this year." Photo and caption: Richard Glassborow.

that and the fact that we are ahead of the curve does seem to be providing us with a certain credibility and makes it difficult to cast us as villains.

Sadly, it is doubtful this is leading to a net improvement in the situation. There is no let-up in businesses promoting keeping more bees in London – "to save the bees"! Only this week a company was boasting on social media about an event they had put on for the Institute of Directors promoting the installation of hives (for a fee) to fulfil Corporate Social Responsibility and environmental credentials. Clearly, there is more to do in promoting our version of the narrative.

The immediate objective of spreading the word is to stop the situation from getting worse by both reducing the increase in numbers of honey bees and improving the environment for all bees and pollinators (and Londoners).

At some point, in some areas we are going to have to face the more challenging question of reducing numbers of honey bees, not just the increase. I know some of us are already taking steps by reducing the number of hives we keep personally. And Holland Park apiary is setting an example of collective beekeeping where a number of beekeepers are collectively managing a small number of hives — a significantly lower ratio of bees to beekeeper and below that achievable as an individual. Both these are a start and an example to follow perhaps but they will not solve the problem. If every LBKA member gave up beekeeping altogether it would barely register such is the scale of the problem in some areas.

Is legislation the answer? Or are there ways in which the prevailing beekeeping paradigm, mostly developed to prioritise honey production, can be changed so the harm is mitigated and the positives enhanced?

Personally, I know what interests me most.

I can't offer any answers but I do propose we allow ourselves to ask questions and see where they go.

Here's my starter for 10: Multiple choice: Why do I want to keep bees in London?

- 1. Because it is interesting (very)
- 2. To produce lots of honey (not going to happen in central London)
- 3. To save the bees (No! the opposite more likely)

And just by way of stirring the pot, I would point out that two very different recent winter lectures, those by Torben Schiffer and Professor Steve Martin, both incidentally pointed to smaller colonies (fewer honey bees).

I also maintain, again, a personal viewpoint, honey bees, however defined – I call them semi-wild, do offer exceptional opportunities for engagement with the natural world.

I am still waiting to carry out my first inspections, but in the meantime, I have just seen my first Hairy footed flower bee (male) this year. I would like to think we can find a way to keep honey bees that does not harm these guys and maybe even improves things for them.

## Announcements

This is our official place for announcements. If you only read one section of the newsletter, it should be this one!

## March's online Monthly Meeting and Pub Social

March's Monthly Meeting will on **Sunday 13th March** at 11:00 at the usual Zoom link (in the Members' Area and in your email) on the topic of **swarm control and management**. An incredibly important aspect of responsible urban beekeeping that benefits from an annual refresher and the sharing of experiences and advice.

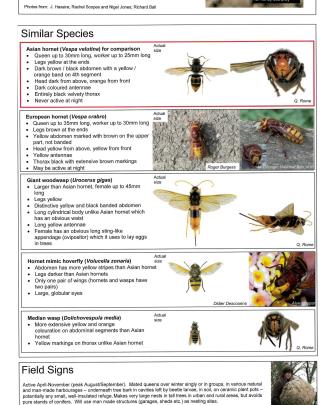
The Pub Social this month will be on **Tuesday 29th March** from 18:30 onwards at Tufnell Park Tavern, 162 Tufnell Park Rd, London N7 0EE, a short walk from Tufnell Park Station (Northern Line). We're back in this great North London pub with lots of space that serves food.

We hope that April's Monthly Meeting **Sunday 10th April** will be the first in-person meeting for over two years! A practical microscopy session on Nosema diagnosis at a venue yet to be decided.

#### School Food matters school visits

We are almost agreed which schools we are going to visit this year. They are mainly within the north and south circular roads. We need people who would like to Announcements LBKA News, March 2022





Asian Hornet Identification leaflet. Source: BBKA website.

Alert!

For more information visit:

www.nonnativespecies.org

www.nationalbeeunit.com







**Spotted by Pip:** Hives blown over at our Mudchute apiary. Photo: Pip O'Byrne.

spend a day talking about pollination, bees and pollinators in mainly primary schools with at least one other person.

Talking to children about bees is fascinating – they love it and are thrilled to see the observation hive and understand what they are looking at. If you would like to spend one day or more with us on this project with School Food matters please contact Annie on events@lbka.org.uk.

#### LBKA's Pollinator Fund

Don't forget about LBKA's Pollinator Fund!

The LBKA Pollinator Fund operates all year round, with grants of up to £1,000 available for full- or part-funded projects that have London pollinators at their heart. Applications are sought from groups such as schools, allotment organisations, tenant & residents associations, horticultural societies, and other small charities. So if you are a member of such an organisation which is developing plans, or just has a "wish list" of projects that might align with LBKA's aims, please contact treasurer@lbka.org.uk for a Pollinator Fund guidance document and application form.

#### Winter Lectures

A reminder of the two upcoming Winter Lectures which will be delivered over Zoom (links will be sent to members in advance). Recordings of our previous ones can be found in the members' area of the website.

Wednesday 23rd March at 18:30: "Swarming -



**Spotted by Annie:** "Bees fine and escaped trees falling on them". Photo and caption: Annie McGough.

oops my bees have swarmed". This is the second lecture this winter from Clare Densley & Martin Hahn from Buckfast Abbey. Hopefully it will be a timely reminder of what's just ahead of us, full of useful tips to help us identify the signs of swarm preparation and mitigate the risk of swarming, while working with the bees' natural instinct for colony reproduction. Surely our bees won't swarm before we hear this talk, will they...?

Wednesday 20th April at 18:30: "Simple Queen Rearing". A final outing for the season from the team at Buckfast Abbey. They'll be describing easy ways to propagate lovely queens without the need to graft or invest in cup kit systems. Doubtless there'll be some admissions of failure too, and more anecdotal evidence that the bees don't always do what we want them to!

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**Spotted by Richard:** "A day in the life of an apiary" at our Eden apiary. Photo and caption: Richard Glassborow.



**Spotted by Richard:** At our Eden apiary after a clear-up operation. Photo: Richard Glassborow.



**Spotted by Geoff:** "This is Barnet BKA training apiary". Photo and caption: Geoff Hood.



**Spotted by Aidan:** Honeybee on a primrose. Photo: Aidan Slingsby.

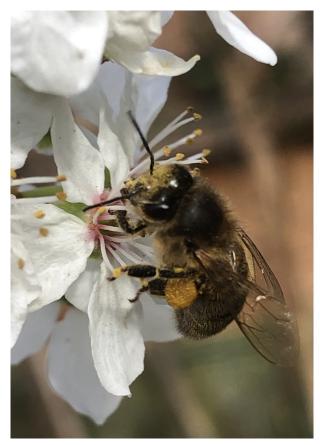


**Spotted by Aidan:** Blackthorn in flower. Photo: Aidan Slingsby.

## Wildflower meadow creation – free online talk

Butterfly Conservation are presenting an online talk on **Tuesday 22nd March at 19:00pm** about how to create wildflower meadows in urban greenspaces. This will be relevant to those wanting to improve sites for pollinators – whether large or small. Creating wildflower meadows is probably the quickest – and cheapest – way

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**Spotted by George:** "A busy honey bee takes advantage of the chilly February sunshine and flies frantically in the crispy blossom of a wild plum tree. Notice the dusting of pollen all over her!" Photo and caption: George Kozobolis.



**Spotted by George:** "About 10 minutes later she is loaded and takes off to deposit her load in the hive only to come back to repeat her everlasting cycle whilst the sun shines!" Photo and caption: George Kozobolis.



**Spotted by George:** "I am not sure whether this is a hover fly or a kind of wasp but she was also seen in the same blossom, only a foot or so away, very busy drinking/collecting nectar." Photo and caption: George Kozobolis.



**Spotted by George:** "About half an hour later, I visited the wild plum tree again. Looking carefully, I noticed a similar worker bee, completely clean with no pollen sack. I could not help but wonder if she was the same bee on another round!" Photo and caption: George Kozobolis.

to improve biodiversity, and it's also good for climate change. But there are some pitfalls, and this talk will explain ways to achieve good results. Sign up for free here.

#### LBKA Courses in 2022

We will be running out Introductory Courses this year after a two-year break. Theory sessions will be delivered via Zoom on the evenings of Tuesday 12th April,

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**Spotted by Eugene:** "Bees busy at Kew today" Photo and caption: Eugene McConville.

Thursday 14th April, Tuesday 19th April and Thursday 21st April. The 60 participants will be allocated to one of three practical sessions on Saturday 23rd April at our Holland Park apiary, Sunday 24th April at our Mudchute apiary and Saturday 7th May at our Holland apiary, with other LBKA apiaries as a backup. Book at our website.

We're looking for helpers. If you would like to help, please contact Annie on events@lbka.org.uk.

## Bee Disease Insurance (BDI) research funding

Many of us have taken out Bee Disease Insurance (BDI). They (so us!) have been funding research into pests and diseases.

EFB Shook Swarm: During 2021, they started a two

year trial on the whole apiary shook swarm method of controlling EFB, held in conjunction with the National Bee Unit. This will continue in 2022 after which the results will be evaluated. To take part, they have information on their website.

**Varroa**: They and their member associations have been funding Salford's bee research (run by Professor Stephen Martin, who gave us a talk last week) with grants of around £150,000 through the original ReVive project and a subsequent follow up project. As this research draws to a conclusion, the results and actions beekeepers can take as a result are explained in this video. In addition a BBKA news special edition is available here.

#### Free second-hand equipment!

Greenwich Park are getting rid of their beekeeping equipment. We are thinking about collecting it and offering the bits we don't want to members. Note that the equipment is used and will need to be cleaned and scorched before using it. We don't know any more about it than in the photo. If you are interested in any of this equipment, are willing to clean and scorch it and able to collect it (from a location yet to be decided), please contact Simon on admin@lbka.org.uk and we'll organise something.



## BBKA Advanced and General Husbandry Training

These are 3-day courses are at Stoneleigh. You can book your place on on of these courses via the BBKA Web Shop.

 Advanced Husbandry Assessment Preparation Training. An intensive residential course, with high tutor to student ratio, providing time and space for both tutor to student, as well as student to student interactions. Will cover both theoretical and practical aspects of the Advanced Husbandry Assessment. Participants are required to hold the BBKA General Husbandry Certificate and to be eligible to take the Advanced Husbandry assessment in the near future. The course is will be run from 15th July to 17th July, costs £350 (including



Member Issay Rodriguez is an artist with an Open Studio on 19th March.

accommodation and meals), and has a maximum of 12 participants.

• General Husbandry Assessment Preparation Training. A programme of 20 hours over three days which covers both theoretical and practical aspects of the General Husbandry Assessment, aiming to give the participants an understanding of what the assessment entails and what they need to do to be successful. Participants are required to hold the BBKA Basic Certificate and to be eligible to take the General Husbandry Assessment in 2023. The theory sessions will be held on 30th April 2022 and 1st May 2022, with the practical on 22nd May, costs £150.00 (participants bring their own lunch), and has a maximum of 12 participants.

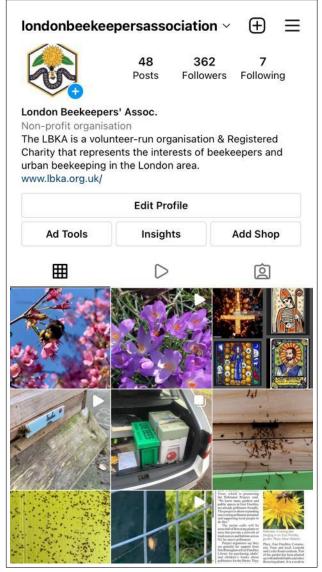
#### Auction

The West Sussex Beekeepers' Association is again organising a **Bee Market and Auction** at Chichester College's Brinsbury Campus (Pulborough, West Sussex) on **Saturday 23rd April**. Details are available from their website.

## @londonbeekeepersassociation on

#### Instagram

Our instagram page is constantly being expanding with new content. This is not possible without **you**! Please keep the content coming, either via Bee Banter or to



@londonbeekeepersassociation on Instagram

instagram@lbka.org.uk. Special thanks to Lucie for curating it.

#### LBKA videos

Just a reminder that videos of many of our Winter Lectures, Monthly Meetings and various other stuff can be found in the Members' Area of the website.

#### Old announcements from February

Check our previous newsletters or contact services@lbka.org.uk for more details.

**Exciting opportunity at Battersea Park Children's Zoo**. If you're interested in volunteering to help set up the apiary and then manage it, please contact Simon Saville at admin@lbka.org.uk.

## Old announcements from January

**Instagram:** Please keep sending your bee related pictures to Lucie at <a href="mailto:instagram@lbka.org.uk">instagram@lbka.org.uk</a> or share them with your authorisation to publish on the Bee Banter

WhatsApp group. And if you are on Insta do follow @londonbeekeepersassociation.

#### Do you have any announcements?

If you've any announcements for the next issue of LBKA News, please send to Aidan at <a href="mailto:services@lbka.org.uk">services@lbka.org.uk</a>.

# March's Committee meeting

Here, we keep you up to date with what the committee discusses at our monthly committee meetings (and what keeps us awake at night). Let us know if you can help or have any suggestions that might help.

## Aidan Slingsby services@lbka.org.uk

We are now closer to agreeing plans for this year's Introductory Courses. Theory sessions will be delivered via Zoom on the evenings of Tuesday 12th April, Thursday 14th April, Tuesday 19th April and Thursday 21st April. The 60 participants will be allocated to one of practical sessions on Saturday 23rd April at our Holland Park apiary, Sunday 24th April at our Mudchute apiary and Saturday 7th May at our Holland apiary, with other LBKA apiaries as a backup. We are recruiting volunteers to help deliver the content and will advertise soon.

We agreed to resume in-person monthly meetings, starting with April's hands-on nosema microscopy meeting, which we are still trying to find a venue for. We also agreed that May's monthly meeting will be Bee health day at our Mudchute apaiary.

We are finalising the School Food Matters plans, but there is uncertainty about where the apiary visits wil be this year, because of the recent uncertainty with our relationship with Holland Park.

Tristram updated us on LBKA's on apiaries and said that he expected we'd have enough colonies for the courses and for Bee Health Day. Outstanding issues include repairing the fence at Eden, our relationship with Holland Park, and waiting on a response from the Battersea zoo.

Howard updated us on education matters. So far, eight people have shown interest in Bee Basic which may rise to 12. He plans to run a 1-day Improvers' course, probably in June. Once confirmed, this will be advertised in next month's Newsletter and Bee Banter.

David updated up on two upcoming Winter lectures and the committee agreed that this season's lectures had been interesting and a great success.

## March in the Apiary

Where we should be with our colonies at this time of year.

## Howard Nichols education@lbka.org.uk

March is a time of increasing activity within the hive but it all depends upon the weather. Assuming the weather improves then the colony at the end of March should be substantially different from the one at the beginning. March days can include warmer, sunny days, which encourage plants to flower early, and bees to forage. The weather can just as easily revert back to cold. The former causes the bees to produce more brood and the latter to retreat back to a cluster. Unfortunately, it is a beekeeping fact, that more colonies die out in March than in any other month of the year.

#### Stores

The main job of the beekeeper is still to keep an eye on stores. Old "winter" bees are dying off and new bees are being born. Food reserves are decreasing but demand for food is substantially increasing. The bees will be using energy flying on warmer days but mainly bringing in pollen, not nectar. They also need to keep the brood at a higher temperature (about 35C) which also uses more energy. Stores can quickly be depleted in March and early April and if this happens, your colony is at risk from starvation.

## The first inspection

The first warm day from the start of March is an opportunity to have a quick look inside the hive. If so, then this will constitute the 1st inspection of the new season. The new colony card should be made up and inspection details recorded. Minimum temperature should be  $10^{\circ}\text{C}$  for a quick look but without taking out brood frames. If there is an exceptionally warm day with the temperature  $14^{\circ}\text{C}$  or more then a detailed colony inspection may be made — see page 10. Otherwise, leave this until April.

If an inspection is not possible, then observing the colony entrance can provide invaluable information. If the bees are bringing in pollen, purposefully entering and leaving (flying a beeline) then these are good signs. If the bees are aimless, listless or without purpose on a warm day then all may not be well.

## Monitoring varroa mites

This is a good time to monitor the mite drop. Leave the inserts in for a week and count the mite drop. If >2 mites per day then some action will be needed in Spring. If >7 mites per day then action is immediately required. It is to be hoped that all our members will have treated for varroa last autumn and / or winter and so will not find themselves with a large mite drop.

The National Bee Unit produces an excellent booklet "Managing Varroa" which is available for free download. There is also comprehensive information about varroa on the NBU website, including an on-line varroa count calculator.

#### Other sundry matters

**Siting your bees.** Those who have not yet acquired bees (but will do so) should prepare the hive and site. If acquiring bees by means of the purchase of a nucleus from a supplier then the order should have been placed by now. Demand often exceeds supply.

Formulate a beekeeping plan for the season. This need not be elaborate and may be such as improving swarm control, attempting a new manipulation, maximising honey production (ensuring there is the maximum number of flying bees in the colony when the honey flow starts), etc. The opportunities are endless.

Brood diseases. Whatever plan you formulate may I ask that you specifically address the matter of brood diseases. EFB is still at an unprecedented level in London and it is good beekeeping practice to devote 2 colony inspections per season exclusively to brood disease inspections. The best times are early spring and mid-summer when the honey flow is in progress. This is because the bees are overstretched at both these times and cannot always efficiently remove the dead larvae. It is even better to do this inspection jointly with another beekeeper as two pairs of eyes are better than one, whilst maintaining any Covid social interaction restrictions at the present time.

**Dead.** Finally, on a sad note, if you find your bees are dead then it is imperative to close the entrance to prevent robbing. Make a note of what you observe then remove and destroy dead bees and frames. Sterilise the hive parts. It is important to try to find out why the bees have died. Winter and early spring colony losses seem to average 20% to 30% so you are not alone. It does not always mean it's the fault of the beekeeper, but it is essential to analyse and learn. Examples of reasons include, but are not limited to, the varroa mite (the number 1 offender), lack of stores, damp / inadequate hive ventilation, site situated in a frost pocket, failing queen or poorly mated queen, too small a colony going into winter. The list goes on.

**Look forward.** On a more optimistic note, the beekeeping season arrives in March. We have several eventful months ahead. I sincerely hope that all of us have a productive season and achieve whatever aims and goals we aspire to with our bees!

## First inspection

Howard's guidance for the first inspection of the year

Howard Nichols education@lbka.org.uk

Before the first inspection, check that you have:

- Checked beesuit (no holes)
- Overhauled smoker from last season.
- Have adequate supply of smoker fuel and disposable gloves for the season

The temperature should not be below  $14^{\circ}\text{C}$  (shirt sleeves weather) with bees flying and bringing in pollen.

You may have no idea what you may find. Hopefully all is well but, we could find...

- Dead colony
- Drone laying queen
- No queen
- 2 queens (due to perfect supersedure in the Autumn)
- An unmarked queen when there was a marked queen in the Autumn
- Frames with mouldy pollen (these are useless and need to be removed at a subsequent inspection)
- Old black frames or with an excess of drone cells (also to be subsequently removed)
- Low on stores.

The objective of the first inspection of the season is simply to assess the condition of the colony and should be undertaken as follows:

- 1. Observe the colony entrance. Are bees purposely flying or aimlessly flying? Are they bringing in pollen?
- Gently smoke the entrance and wait a couple of minutes for it to take effect. Remove roof and place upside down in front of hive. Gently remove crownboard (likely to be propolised), then the dummy board.
- 3. With the bees gently smoked and the colony prepared for inspection then examine each frame in turn. Every time a colony is opened you should ask the same 5 questions and 1st inspection of the year is no different. These should be committed to memory:
  - Has the colony sufficient room?
  - Has the colony sufficient stores until the next inspection?
  - Is there evidence of a laying queen?
  - Are there signs of disease or abnormality?
  - Is the colony building up (brood in all stages on several frames?
- 4. At this first inspection the state of the frames should also be examined. If they are old, have an



Issay Rodriguez did BBKA's Microscopy Beginners Course at Stoneleigh. "It was so much fun! The morning session started with an introduction to microscopy. We did abdominal dissection of bees mounted in wax in the morning. I started slow but managed to mount the ganglia and sting on a slide to see them up close under a compound microscope. Photo and quote: Issay Rodriguez.



"In the afternoon, we worked in teams to examine different kinds of pollen under the microscope and used Rex Sawyer's book to compare with the microscopic images of the slides we prepared." Photo and quote: Issay Rodriguez.

excess of drone cells or pollen mould then they can be moved towards the flanks ready for removal at a later date. (The bees will not draw out foundation at this stage of the season as too cold).

- 5. Close up colony, checking that everything is secure.
- Finally, make the 1st entries of the season on the new colony record card.

# Man-made Breeding and Selection vs Natural Selection

The second of Torben Schiffer's Winter Lectures to LBKA was given in early February and, after his first lecture reported on last month, gave us much more food for thought. See next month for Martin's article on "The Schiffer Tree" – Torben's suggestion for creating wild honeybee habitats.

Martin Hudson I BKA Member

#### The Presentation

Torben Schiffer, from the University of Würzburg, gave the second of his two LBKA Winter Lectures ("Man-made Breeding and Selection is the Honeybees' Demise"), in February to a much-depleted audience, which was a shame because what he had to say was important in the London Beekeeping context, though controversial to 'traditional beekeepers'. The lecture can be viewed by LBKA members in the members' area of the website

Schiffer again challenged us to consider the appropriateness of our beekeeping methods, and suggested that the way we 'manage' honeybees is not doing them, or any other pollinators, any favours, and is likely to lead to their eventual demise.

His main message was that 'keeping honey bees alive' (by feeding, breeding out natural behaviours, and treating to 'eradicate' bee diseases) is upsetting the natural balance of all pollinators in their natural environment. Despite the fact that Greater London is by no means a 'natural environment', his concerns — mostly highlighted in his first lecture and reported on last month — are appropriate to our own situation, where the number of managed ('reported') colonies, currently thought to be between 5,000 and 7,000, has more than doubled in the last decade, and there are many parts of the capital where their density is unacceptably high, as our own 'London Bee Situation' paper suggests. Schiffer's solutions to this situation are, however, radical.

He started by suggesting that if natural selection of honeybees is stopped or restricted, no evolution will occur. Bees have been kept by humans in skeps – similar to their natural environment – for many hundreds, even thousands, of years but, in the last 150 years, management of honey bees has changed dramatically, as has much of the natural environment. Natural selection kills all offspring that do not show behaviours needed to survive, and humans did not previously interfere with this natural evolution.

We now use square wooden boxes with comparatively thin walls which he described in January as demanding much greater workload from the bees (to maintain even temperature and humidity). In addition, old trees have largely been felled to feed the need for wood following two world wars, so new forests do not contain the ancient tree cavities that were present in older woodland.

Scientific research has identified that colonies will select a particular queen to become the single queen in a colony – he suggested that, particularly in poor weather, there can be multiple queens in a colony. We do not know how the workers decide which queen will be the one to 'keep'. However, we know that only the fittest drones will reach the congregation area, so only those with the best genes ('the fittest') will result in mating and a large variety of these 'good' genes (from multiple 'fit' drones) will return with the queen in her spermatheca. If we restrict mating to one or two drones, by artificial insemination, then the gene pool will be significantly poorer.

Encouraging development of brood (by providing larger nest boxes) as well as excessive grooming, washboarding and propilising in poor environments all wastes resources. He showed a video of the waste and debris in the base of one of his artificial tree cavities (his 'Schiffer Tree'), with a 'micro-fauna' mixture of mites, wax moth larvae, book scorpions, dead bees and mould lying below a gap. Above this debris, is a 3-dimensional web of bees that stop any pathogens from the debris or from outside (such as wasps or hornets) moving up towards the combs, and this 'web' is also maintaining even temperature and humidity on the combs above - creating ventilation channels or pathways for incoming foragers whenever necessary. House bees from the combs above come down to feed the web bees, which will also reject (using vibration-messaging) any 'foreign' bees seeking entrance from other colonies (robbers). The space in which this 'web' operates will often only be some 6 cm in diameter, making it easier to defend than a larger opening. Have we ever seen this behaviour in our square boxes? This 'bee-web' cannot be created there, because there is insufficient room below the bottom of the combs. It would be interesting to try putting, say, an empty brood box below the ones with comb in them (but above the floor/entrance), to see of such a system is adopted by that colony.

Torben went on to describe a bee colony as a piece of 'fine tuned clockwork' – with only the required amount of brood, and 'intake' (pollen, nectar, propolis and water) to suit the conditions. Too much or too little intake creates a 'selectional factor' (which determines natural selection). Excessive grooming or washboarding (the bees' method of removing condensation) is necessary in poorly-controlled environments. The workload of the workers will be significantly affected by adding boxes (eg supers), creating difficult circumstances for the bees. This is why mould growth (as well as other unwelcome pathogens) occur in square boxes (but not

in a tree cavity), because the bees are unable to remove all high-moisture content and other pathogens, such as wax moth and varroa from the nest.

Torben said that ant colonies sometimes share the same tree cavities as bees, so they also share their defence mechanisms. Bees also sometimes 'use' wax moths as tools to assist them with replacing old comb, by allowing them access to consume comb they wish to replace. He quoted Wendell Berry, the American poet and novelist, who said "We cannot know what we are doing until we know what nature would be doing if we were doing nothing."

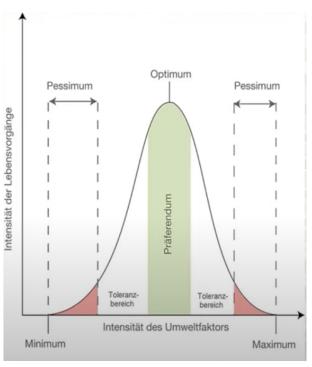
He suggested that man-made breeding and selection is trying to subdue bees' natural behaviour to meet our own demands. He (amusingly, I thought!), described the analogy of a 'Fort Knox project' which ensured that every beekeeper in a community was provided with more bees, even if some of them lost all their colonies. He equated this to 'transporting polar bees (he meant 'bears') into the desert, and seeing how many of these 'bees' survived – describing the survivors as 'the good ones'. If we then returned these 'good polar bees' to the North Pole, they would not survive. That is the same for our current management techniques for bees." We are breeding their natural defences out of them.

He described the adapted bees being examined by Tom Seeley in the Arnot Forest in the US, which are smaller than bred bees, have more rounded head and thorax, rounder wing shape, and are resistant to foulbrood and varroa, but, he said, these bees would be killed by breeders, because they 'looked wrong'. "Who gives us the right to adjust the bees to our needs, and make them less and less able to survive independently? Enforced adaption projects, such as 'Fort Knox' detailed above won't create bees that are able to survive in natural conditions."

Finally, Torben described the 'optimum and pessimum curve' (see diagram). For any species, the further away from 'optimum conditions' they are moved, the less viable are the environmental conditions for their survival. This summarises Schiffer's whole message. If bees are housed in a natural environment, high off the ground in an enclosure where they can defend their brood and stores from pathogens, in a rural environment and in stable temperatures and humidity ("the optimum"), they have the best chance of survival. The further away from this ideal, the less likely they are to survive, and in the (red) 'pessimum' areas - such as in square boxes with cold corners, wide extremes of temperature and humidity, lack of forage and with less ability to defend their home - the more they are likely to die.

#### The Discussion

David Hankins, who was chairing the lecture, thanked Torben for his fascinating talk, and asked him to confirm his summary – that, as beekeepers, we are not only managing, but breeding dependence on humans into bees. Torben pointed out that, even if we are not



Slide from Torben's talk: "Optimum and pessimum curve".

breeding out natural selection, we are keeping bees in boxes, and keeping them alive, which results in them surviving when, in nature, they might not.

Members questioned the viability of allowing natural selection or ideal conditions in London, where the 'antisocial' nature of swarms, serious diseases or very defensive colonies would 'not go down well'. How can we improve how we are keeping honey bees? Could we continue to 'manage' bees if we are unable to inspect? Does the shape of the ideal nest matter? Is that the issue? Torben referred to research many decades ago in Chicago, where a serious outbreak of foulbrood had been dealt with by destroying 300 wild colonies, all of which were found to be foulbrood-free, but 13% of managed hives in the area at the time did have the disease. Before beekeepers changed from skep husbandry systems to boxes, there had been no outbreaks of foulbrood reported. In a more recent survey, only three wild colonies had foulbrood in them, and two of these were in chimney stacks. He believes that a square box placed close to the ground is placing the bee's housed there already very close to the 'pessimum' point in the optimum/pessimum curve. Any further disruption can tip them into the 'no survival' position. He suggested that Seeley's research has indicated that bees' preference is for a smaller, rather than a larger cavity, but that it must be propilised and allow a throughput of air to provide the best environmental conditions.

Richard Glasborrow showed a video of a wild colony in a big felled tree, near him in south west London which has had a colony in it for seven years or so. Although accepting that this was a 'sample of one', he asked Torben whether this was a preferable location. Torben was interested to see that fungus is also growing on this dead tree because he had seen (but had not researched)

evidence that bees use fungi to assist them, perhaps for self-medication, but he also felt that, despite the fact that they were close to the ground, the advantage of the size of the tree (2 metres diameter) provided good insulation properties, which might outweigh their position close to the ground.

Torben has written a book (in German) called ""Evolution der Bienenhaltung: Artenschutz für Honigbienen. Bienen besser verstehen" ('Evolution of beekeeping: species protection for honey bees. Better understanding bees'), which has not yet been translated into English. It was suggested that LBKA might be able to find a member who could translate the book, in view of its relevance to the 'London Bee Situation'. He offered to send a pdf of the e-book, which could be used to achieve this. Meanwhile, another relevant book, "What Bees Want – Beekeeping as Nature Intended", written by American beekeepers Susan Knilans and Jacqueline Freeman, is about to be published. Torben has written the foreword to this book.

Richard concluded the discussion by also thanking Torben for his thought-provoking and challenging talk, and suggesting that the development of 'boxes' allowing humans to remove honey without destroying the colony and to inspect for disease – more than 170 years ago – has not been reviewed since then, but Torben's research has provided information which suggests that it should be reviewed now.

### Where do we go from here?

I have been moved by Torben Schiffer's views presented in both lectures, but I realise that, as beekeepers, it is difficult for us to consider changing our husbandry methods so radically as to address his concerns effectively, because the result of what he proposes would significantly reduce (eradicate?) the amount of surplus honey produced, and obtaining any would mean the almost inevitable death of the colony, as was usually the case with the original single-entrance skeps. I cannot help thinking, however, that we must move towards meeting his concerns about how much we are 'managing' our colonies for our own benefit, rather than for that of the bees. This issue demands wider discussion both in beekeeping communities and amongst those concerned about the effects of human behaviours on the world's environment. I hope that these articles in LBKA's Newsletter will generate serious discussion of these issues.

Focus on Forage LBKA News, March 2022

## Focus on Forage

Mark tells us what's in flower at this time of year. This article is reprinted from last year.

## Mark Patterson forage@lbka.org.uk

March is officially the first month of spring for us in the UK. Although we've had some warm days, it's been pretty wet and cold recently. The first of the spring flowers are already putting on a colourful show of yellows, purples and shades of white. **Snowdrops** are starting to pass their best, having flowered in large numbers since late January. The early flowering **crocus** species are currently looking at their best across most of London. The later flowering large flowered crocus varieties are just starting to join the display too. These and other spring bulbous plants include **Winter Aconite**, **Anenemone blanda**, **Squill** and **Muscari**. These are valuable early sources of pollen for bees.

Garden plants important to bees this month include the **Hellebores** (the hybrid Hellebores in my garden are particularly popular with bees at the moment), **Pulmonaria** and **Wallflowers**. Both the biennial bedding wallflowers and short lived perennial varieties are attractive to bees, but it's the Everlasting Wallflower *Bowles Mauve* that is flowering best at present; the others will put on a fantastic show towards the end of March and into April.

Several Spring flowering trees are important to bees and these include White Poplar, Willow, and Hazel. The large Hazel tree in my apiary has been flowering since January but is at its peak now. The willow and white **beam** catkins are just starting to open. One of the best small willows for gardens is Salix caprea Kilmarnock which is a pussy willow type with large fluffy catkins which become covered in bright lemon yellow pollen. All manner of bees adore it. Last spring whilst cycling through Archbishops Park en route to the LBKA monthly meeting, I passed a trio of these dwarf weeping trees which were covered in honey bees, Ashy Mining bees, Painted Mining bees and several bumblebees. These trees all have pollen with a high protein and fatty acids content valuable to bees rearing brood and for queens fattening up ready to begin laying.

Shrubs flowering this month attractive to bees include flowering currant, Sarcoccoca, blackthorn, flowering quince and camelia. At last month's RHS early Spring Flower Show I bought 2 new camelias for my garden, a light pink one and a dark pinkie red one called "Adeyaka". Both are open single flowered varieties which flower from Late February through to Early May and are "self cleaning" varieties which mean the blooms drop as soon as they are pollinated, or if the blooms become frosted resulting in a neat looking shrub



Primrose.



Winter acconite.



Wild damson.

Upcoming events LBKA News, March 2022



Buff tailed queen on crocus.



Honey bee on crocus.

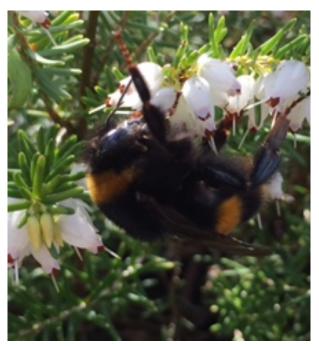
without the tainted frost damaged petals which can look unsightly.

Other flowers making an appearance include lesser celandine, sweet violet, cowslip, primrose, white deadnettle, bugle, ground ivy and the first of the Spanish bluebells (*Hyacinthoides Hispanica*) whose blue-green pollen Honey bees will collect. white deadnettle in particular is a valuable wild plant for bumble bees and some of the longer-tongued solitary bees. Its pollen is rich in protein and fats.

## Jobs in the garden

This time of year presents us with the last opportunity to lift and divide herbaceous perennials before they start to put on significant growth. I've just lifted and split my Helleniums, hardy geraniums, Japanese anemones and sedum spectable.

Plant out herbaceous perennials that were grown from seed or cuttings last year. Get them in the ground now so they have time to spread out their roots ahead of the coming growing season. Less hardy plants may still require protection with fleece. Have fleece available to protect the blooms of soft fruits. My **peach** and **nectarine** buds are starting to open — will I get any fruit this year?



Buff tailed queen on winter heather.

Early March is the last opportunity to prune apples and pears. Stone fruits such as peach, plum and apricot should be pruned in late summer. When pruning apples and pear resist the urge to cut back too much growth which the trees respond to by putting on excess vigorous regrowth. Unlike plum and other stone fruits which flower on the previous year's wood, Pip fruits require 2 year old material to develop flower/fruit buds.

## Upcoming events

Sunday 13th March: Monthly meeting: Swarm management

11:00-13:00 at Same zoom link as usual (in the Members' Area of the website and sent to your email).

Tips on managing swarms as a responsible urban beekeeper.

Wednesday 23rd March: Winter Lecture: Swarming – oops my bees have swarmed

18:30 at via Zoom (see your email for a link)

This is the second lecture this winter from Clare Densley and Martin Hahn from Buckfast Abbey. Hopefully it will be a timely reminder of what's just ahead of us, full of useful tips to help us identify the signs of swarm preparation and mitigate the risk of swarming, while working with the bees' natural instinct for colony

reproduction. Surely our bees won't swarm before we hear this talk, will they...?

#### Tuesday, 29th March: Pub Social

18:30 onwards at Tufnell Park Tavern, 162 Tufnell Park Rd, London N7 0EE, a short walk from Tufnell Park Station (Northern Line)

We're back in North London this month. A nice pub with lots of space that serves food.

## Sunday 10th April: Monthly meeting: Nosema and microscopy 11:00-13:00 at TBC

Our first in-person meeting for over two years will be on using microscopy to diagnose bees for nosema. Bring 30 or so freshly-killed bees that have been humanely killed in the freezer overnight. You can collect them in a polythene bag as they return to the hive.

## Committee

Please do not hesitate to get in touch with a member of the committee if you have any questions, requests, suggestions. We are:

- Chair: Richard Glassborow, chair@lbka.org.uk
- Treasurer: David Hankins, treasurer@lbka.org.uk
- Secretary: Simon Saville, admin@lbka.org.uk
- Education: Howard Nichols education@lbka.org.uk
- Membership: Aidan Slingsby, services@lbka.org.uk
- Events: Annie McGeoch, events@lbka.org.uk
- Apiaries: Tristram Sutton, apiaries@lbka.org.uk
- Mentoring: Elliot Hodges, mentor@lbka.org.uk
- Resources: Will Fry, resources@lbka.org.uk
- Stuart Kennon, stuart.kennon@lbka.org.uk

Our website is <a href="http://www.lbka.org.uk/">http://www.lbka.org.uk/</a> and the pictures are in the same order as the names above.



















