



The London Beekeepers' Association

LBKA News

December, 2021

Welcome to the last newsletter of the (calendar) year! There's a lot of wax in this month's issue with Geoff showing us how to recover old wax (p10) as well as some photos from other members. Lucie provides a tried and tested recipe to honey sweets (p15). We also have news of no less than five scheduled Winter Lectures over the next few months (p2). Also a reminder about our educational offerings and there are still places on Howard and Richard's microscopy course which is really a unique opportunity. And our Christmas Quiz on Sunday. Thanks to the others who have contributed to the newsletter this month, including regular contributions from Richard (p1), Howard (p9), Mark's annual Christmas article (p16), Janet's roundup of Bee Banter (p18) and Martin's proofreading.

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Thank you to this month's contributors: **Johnny Capalonga, Lucie Chaumeton, Janet Evans, Richard Glassborow, David Hankins, Geoff Hood, Martin Hudson, Eugene McConville, Howard Nichols, Mark Patterson, Stephen Wheelwright and Luke Wyatt.** Would you like to join these esteemed contributors? If so, contact me.

Happy beekeeping and we wish you all a Merry Christmas and a Happy New Year.

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

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From our Chair

Richard Glassborow
chair@lbka.org.uk

From a purely beekeeping point of view, I can honestly say that, for me, 2021 has been the worst year I can recall.

The winter of 2020/21 was so mild most of my colonies were huge by March and had to be swarmed or split. April never got onto double figures, May rained almost every day. Colonies couldn't build up, new queens couldn't mate or mate well and there were a lot of drone laying queens, laying workers, failing queens and failing supersedures. Many colonies were too small to take advantage of June but anyway the weather had swung to the other extreme and we had a spell with temperatures approaching 40°C. Many beekeepers are reporting yields down by 60–80%. EFB was a scourge once again: I haven't seen the figures yet but I got the impression they are not quite as bad as 2019, but that year was double the worst on record.

Otherwise, it has been an exciting year. Our schools programme has been difficult but very successful.

The association is on a journey, partly in response to our own report on The London Bee Situation and partly to accommodate fresh thinking and new tools discov-



The Chair and Trustees of the LBKA wish all our members a Happy Christmas.

SPEEDQUIZZING LIVE APP.

The App you need to install (left) in order to participate and be in with a chance of winning this incredible bespoke prize (right).

ered out of necessity through dealing with COVID restrictions. Have a look (and publicise) [details on our webpage](#).

On the London Situation, we have been extremely cautious to date – it's a difficult situation for a bee club! But our message does seem to be gaining traction outside our membership. Just as well, because enquiries coming into the Association suggest another misinformed, covid inspired surge to put more honey bees into London to "help bees" is underway. Fortunately, we are finding many of these readily accept the evidence we are able to show and are willing to look instead at actions they can take to improve habitats for pollinators instead. To do that properly however, is not always as easy as plonking a wooden box on a bit of roof.

On that front we still have much to do. In the meantime, mid-December approaches. Time to be thinking about oxalic acid for those pesky mites. Then it's frame making and all those other tasks to complete during this quiet time!!

Announcements

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

December's online Monthly Meeting and Pub Social

Elliot will lead November's Monthly Meeting on **Sunday 12th December** at 11:00 with questions from Howards and others and the change to win a glass drone (see top of page). This will be at the usual Zoom link (in the [Members' Area](#) and in your email). In addition, you will need a smart phone or tablet that you can install the "Speed Quizzing Live" for [Android](#) or [iOS](#). The app is free and should look like in the image at the top of the page. Make sure it is the 'live' version of the

app which is an orange colour; the blue version is not suitable.

There will be no (official) Pub Social this month. The next one will be on **Tuesday 25th January** from 18:30. If you've a pub suggestion, let us know.

January's Monthly Meeting will be led by Howard on "Pests and Diseases". It will probably be via Zoom at the usual link, but we'll confirm nearer the time.

Winter Lectures

Due to a few communication issues we failed to secure lectures for late November and December. However we now have dates booked for January, February, March and April. All will be delivered remotely via Zoom, and invitations will be emailed to all members closer to the time.


Saturday 15th January: "How modern beekeeping enhances nectar competition and contributes to species extinction of wild pollinators". This is a repeat performance for Torben Schiffer, (National Honey Show 2021), from the Julius Maximilian University of Würzburg. It may be a contentious subject for us, but fits well with LBKA's exploration of The London Situation and desire to discover truly sustainable beekeeping models.

Saturday 5th February: "Man-made breeding and selection versus natural reproduction and selection – why modern beekeeping will eventually send the species of honey bees into its demise". Another challenging lecture from Torben Schiffer, and a timely opportunity to discuss queen rearing, the pros & cons of imported queens, London mongrels and much more. We may not get all the answers, but we should come away with plenty to think about!

Wednesday 16th February: "Varroa-resistant Honeybees". This lecture will be delivered by Professor Stephen Martin from University of Salford, and will focus on the various tolerant mechanisms identified, and how some honey bee populations in Brazil and parts of Africa, USA and UK all appear to have evolved similar ways to combat the Varroa mite.

Wednesday 23rd March: "Swarming – 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: "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!



Produced by Lucy Cornwall, Chaf Bony (NNS), Gay Morris, Mike Brown (National Bee Unit) with assistance from Corinne O'Hagan (National Biodiversity Data Centre Ireland) Stuart Roberts (BBSRC)

www.nonnativespecies.org

Alert!

Asian Hornet

Recent sightings of this species to: alernnonnative@ceh.ac.uk

Species Description

Scientific name: *Vespa velutina*
AKA: Yellow-legged Hornet
Native to: Asia


Habitat: Nests usually high in trees and man made structures, sometimes closer to the ground; hunts honey bees, other insects and also feeds on fruit and flowers.

Not easily confused with any other species. Dark brown or black, velvety body. Characteristically dark abdomen and yellow topped legs. Smaller than the native European Hornet.

Introduced to France in 2004 where it has spread rapidly. In 2010 the first UK sighting was confirmed in Gloucestershire. High possibility of introduction through, for example, soil associated with imported plants, cut flowers, fruit, garden lawn furniture, plant pots, freight containers, or even untreated timber. The possibility that it could fly across the Channel has not been ruled out.


A highly aggressive predator of native insects. Poses a significant threat to honey bees and other pollinators.

Do not disturb an active nest. Members of the public who suspect they have found an Asian Hornet should send a photo to alernnonnative@ceh.ac.uk.



Key ID Features

Asian Hornet Queen

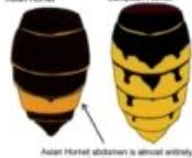


Queens up to 30 mm long, workers up to 25 mm long


Extremely dark brown or black velvety body with a few yellow bands

Legs brown with characteristic yellow ends

Asian Hornet vs **European Hornet**



Asian Hornet abdomen is almost entirely dark except for 4th abdominal segment





Asian Hornet 'swarming' for honey bee stings

Photos from: J. Hearn, Rachel Scopes and Nigel Jones, Richard Bell

Similar Species

Asian hornet (*Vespa velutina*) for comparison



- Queen up to 30mm long, worker up to 25mm long
- Legs yellow at the ends
- Dark brown / black abdomen with a yellow / orange band on 4th segment
- Head dark from above, orange from front
- Dark coloured antennae
- Extremely black velvety thorax
- Never active at night

© Raine

European hornet (*Vespa crabro*)



- Queen up to 30mm long, worker up to 30mm long
- Legs brown at the ends
- Yellow abdomen marked with brown on the upper part, not banded
- Head yellow from above, yellow from front
- Yellow antennae
- Thorax black with extensive brown markings
- May be active at night

Roger Burgeess

Giant woodwasp (*Ducerus gigas*)



- Larger than Asian hornet, female up to 45mm long
- Legs yellow
- Distinctive yellow and black banded abdomen
- Long cylindrical body unlike Asian hornet which has an obvious waist
- Long yellow antennae
- Female has an obvious long sting-like appendage (ovipositor) which it uses to lay eggs in trees

© Raine

Hornet mimic hoverfly (*Volucella zonaria*)



- Abdomen has more yellow stripes than Asian hornet
- Legs darker than Asian hornets
- Only one pair of wings (hornets and wasps have two pairs)
- Large, globular eyes

Dexter Deacon

Median wasp (*Dolichovespula media*)


- More extensive yellow and orange colouration on abdominal segments than Asian hornet
- Yellow markings on thorax unlike Asian hornet

© Raine

Field Signs

Active April-November (peak August/September). Mated queens over winter singly or in groups, in various natural and man-made hollows – underneath tree bark in cavities left by beetle larvae, in soil, on ceramic plant pots – potentially any small, well-insulated refuge. Makes very large nests in tall trees in urban and rural areas, but avoids pure stands of conifers. Will use man made structures (garages, sheds etc.) as nesting sites.



For more information visit:
www.nonnativespecies.org
www.nationalbeeunit.com

Alert!

Report sightings of this species to:
alernnonnative@ceh.ac.uk

Please put those dates in your diaries, and look out for Zoom invitations by email closer to the time.

Instagram

Thanks to Lucie for resurrecting our [Instagram account](#) with lovely pictures and captions that put them in context. Please follow and promote to your networks.

If members have suggestions of content, they can either post to the Bee Banter WhatsApp group or email suggestions to Lucie at instagram@lbka.org.uk.

LBKA's educational offerings

Although you might think that exams aren't for you, we usually learn lots of useful things that we wouldn't ordinarily learn by preparing for exams. As a members' benefit, we will help you prepare for BBKA modules and we recommend everyone considers taking them, whatever your level. See more information in Howard's piece on page 6.

We also have the unique, fascinating and hugely popular microscopy course. Sign up quickly if you'd like to do it! Details on page 8.

LBKA's Pollinator Fund

In a small way, LBKA is helping improve the forage situation for pollinators through its grant scheme. It's been another difficult year for planning and delivering forage projects in London, so it's not surprising that we've managed to support so few projects to fruition in recent months. However, we hope that conditions are improving and enabling organisations to start planning for next spring. So we think this is the right time to remind members of the Pollinator Fund, and encourage applications for the coming growing season.

Since it was first advertised in January 2020, LBKA has committed funds totalling over £2,500 to St Paul's Community Centre, the Friends of Hillside Gardens and Palace Road Nature Gardens, St Mary's Secret Garden, and the Friends of Westcombe Woodlands. This is a good start under the circumstances, but we want to do more.

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.**

Finally, some news from one of the successful applicants. St. Paul's Community Centre, was awarded £615 from the fund in July last year to transform several spaces in St Paul's Churchyard in Clapham Old Town (where we used to hold our Introductory Courses). An

Asian Hornet Identification leaflet. Source: [BBKA website](#).



Before (left two images) and after (rightmost image) after St Paul's Churchyard LBKA's "Pollinator Fund" funded forage creation project.

area abutting the church building, once dominated by barley grass, was cleared, had the soil improved, and was planted with **Aster**, **Anthemis**, **Geranium**, **Inula**, **Lavender**, **Stachys** and **Veronica**, all under-planted with **alliums**. By June this year the difference was impressive – just imagine what it will look like after another season's growth; see the photos above. Other beds with stand-alone shrubs have been enhanced with the addition of nectar-rich perennials and biennials such as **Veronicastrum** and **Digitalis**.

Old announcements from November

Check our [previous newsletters](#) or contact services@lbka.org.uk for more details.

Can you take part in a survey?

Honey sales: If you have or want to list [your honey for sale on our webpage](#), please check and email services@lbka.org.uk if you have amendments.

Membership renewals: Our membership year ended last month and members will have had an **email telling them how to renew their membership**, if they wish. Note that renewals are **not** automatic, but it is **very easy** to renew. If you didn't get the renewal email, please check your spam folder and/or email services@lbka.org.uk.

Research survey: As part of Samuel Perichon's research ([here](#), [here](#) and [here](#)), he is conducting a survey of professional and amateur beekeepers in several European countries. You can take part [here](#) and it will take about 15 minutes to complete.

Old announcements from October

Buy LBKA honey from our Mudchute apiary Members are being offered previous years' honey from our Mudchute apiary at £5 per 8oz jar. Collection will be

from the LBKA store in Big Yellow, 120 Stewarts Road, Battersea. Please let Tristram (apiaries@lbka.org.uk) have your order.

London Bee Situation LBKA's official position on the "London Bee Situation" is at <http://www.lbka.org.uk/london> with our report, other reference documents, and further reading. Do take a look and feel free to share with others.

Do you have spare wax to donate to a school? They are happy with unfiltered wax. Please email elsowitsch@yahoo.co.uk if you can help.

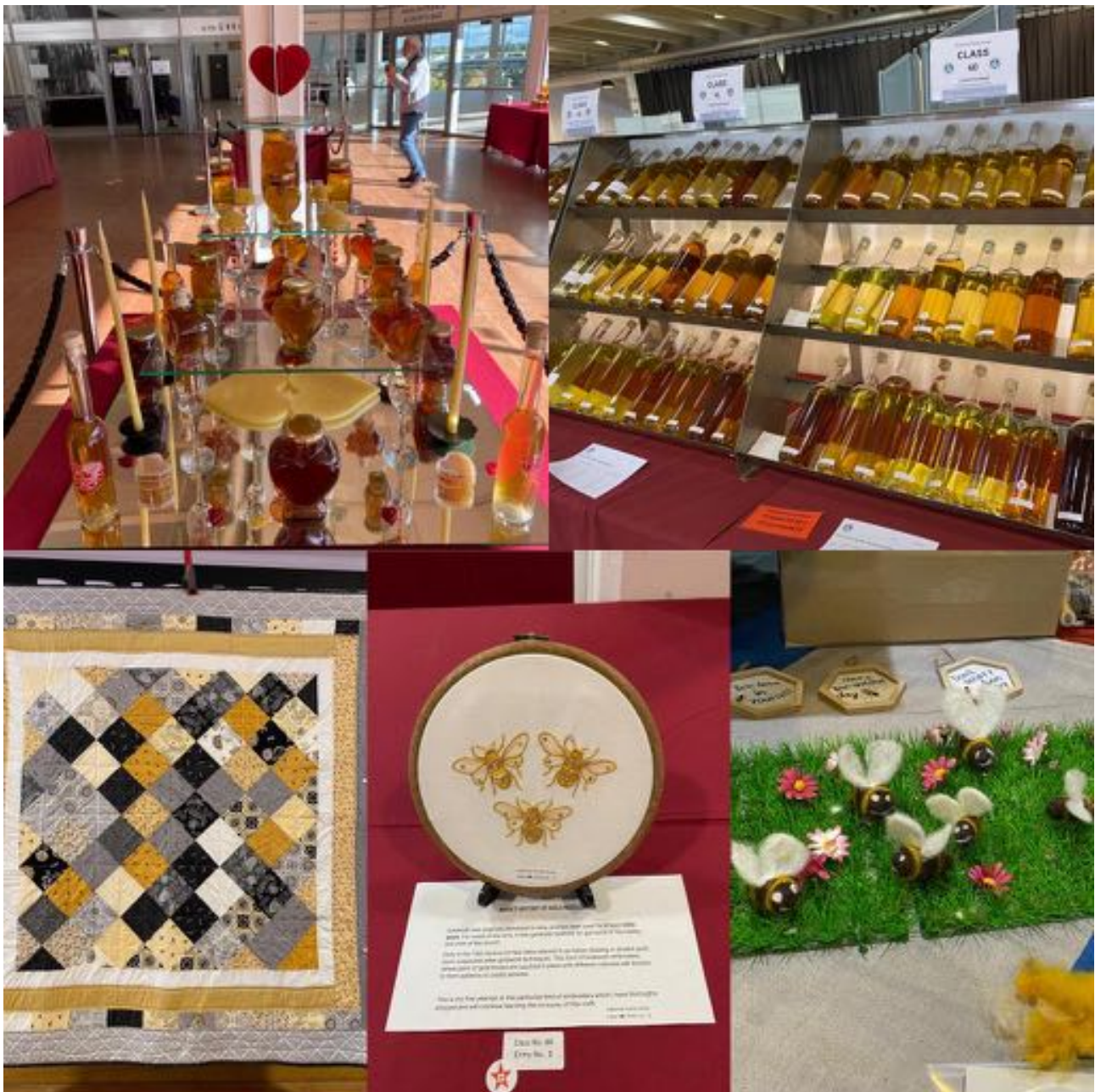
Old announcements from September

Contribute to the Newsletter: Please consider contributing meeting writeups, articles, photos, and/or recipes to the newsletter.

Old announcements from August

Congratulations: Congratulations to members – Rachel Dewhurst (distinction), Karlis Briedis (credit), Kyle Moreland (pass), Luke Wyatt (credit), Katharina Bielenberg (pass), Rodney Phillip (credit), Sergio Ramos (credit), Anna Gaudion (credit), Annette Pearson (credit), Sue Irani (credit), Deborah Blythe (credit), Khevir Jettoo (distinction) and Andrew Hinton (credit) – who passed the Basic Assessment. Well done!

Paid opportunities for members. LBKA occasionally receives invitations or requests to undertake paid work such as apiary management, ecological/planting design/consultancy or educational consultancy. If you have the skills that may make you suitable and you would be interested in being considered to take on such work, please contact Simon Saville at development@lbka.org.uk. Once we've verified your skills, we'll start to push suitable opportunities your way when we get



Images from the National Honey Show at which Geoff Hood and Mark Patterson won prize ([winners here](#)). Photo: Lucie Chaumeton.

them. See more details in the last few month's newsletters ([link above](#)).

We need to help run our social media. If you are good at communicating with social media, then we need your help. Our social media channels already have an impressive reach, but we aren't using them very proactively to manage our communications. This is a good opportunity to help develop a profile of a local charity and its charitable objectives. Please contact Simon Saville at development@lbka.org.uk to find out more.

Do you have any announcements?

If you've any announcements for the next issue of LBKA News, please send to Aidan at services@lbka.org.uk.

December'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

In our first committee meeting since the AGM, the first thing we did was to confirm the appointment of



Spotted by Lucie: Giant willow sculpture by local N2 artist. Photo and caption: Lucie Chaumeton.

the new committee and trustees... and also to co-opt Stuart back onto the committee and as a trustee (he wasn't confirmed as such at the AGM due to a technicality).

Richard shared his thoughts about the "Character and Direction" of LBKA. We discussed where we wanted to get to and what to prioritise in the shorter term. As well as offering a beekeeping course this year, we are also thinking of opening up our apiaries so that more members can see them and get involved in them. As ever, we acknowledged that what we do is constrained by our capacity. We noted that many members have offered their help and we will contact them to discuss what they can help with.

David presented a draft budget for the year. It was approved on the proviso that it may need to change as the year develops and will be reviewed in future meetings. We also agreed to extend our Pollinator Fund and will continue to seek applications for up to £1,000 per project to help provide forage up to a total of £5,000 for the year.

Turning to more operational issues, David has organised five more winter lectures, we're awaiting more details about next year's School Food Matters programme, the Christmas Quiz is in hand. We have a draft list of topics for this coming year's Monthly Meetings, with January's meeting confirmed as "Pests and Diseases". The hope is to have these meetings in-person at our Holland Park apiary. We are still finalising details.



Stephen treated his bees with Oxalic Acid and they were nicely clustered. Photo: Stephen Wheelwright.

The committee reviewed the overwhelmingly positive feedback from the members who provided it when they rejoined this year and will follow up some of these comments. The committee also noted (with thanks) those who offered their help in the coming year and we will contact them.

Education Matters

This important announcement is repeated from last month.

Howard Nichols
education@lbka.org.uk

2022 BBKA Basic Assessment

Both the BBKA and London Beekeepers Association encourages members to take the BBKA Basic Assessment where possible. The BBKA requirement for entry is that the applicant has managed at least one colony of bees for a minimum period of 1 year and is a BBKA member. The assessment is fairly straightforward and the syllabus can be downloaded free of charge from the BBKA website. Follow the dropdown menu for "Members" then "examinations and assessments". The cost is £20 and entry forms can also be downloaded at the same time.

Any LBKA member who has managed at least one colony of bees for a minimum of 12 months and wishes to take this assessment please confirm by email to education@lbka.org.uk. I will then be able to let you have some electronic course notes to read at your leisure over the winter months. Two members have already notified their interest. The BBKA website should be sufficient to deal with any queries regarding the assessment. Alternatively, ask another LBKA member who has taken it. Preparation for the Basic is an interesting way of continuing your beekeeping activities through



Five year's worth of wax. Photo: Johnny Cappalonga.

the winter months. Even if you have been keeping bees for several years but not previously taken the assessment then please do seriously consider taking it in 2022. It is well worth the effort.

London Beekeepers Association will also run a revision course in Spring for members wishing to take the assessment. This is likely to last for 3 evenings (2 hours per evening) in early April. The assessment itself is both practical and simple oral questions. It lasts about 1 hour. We cover the theory on the revision nights and, for those wanting it, also offer a practical session at an apiary beforehand.

The assessment is not difficult, is within the capabilities of anyone who has been handling bees for 12 months and who is willing to download the syllabus and un-



Beautiful wax by Luke. Photo: Luke Whyatt.

dertake some background reading. We also supply free course notes in electronic format.

2022 BBKA Modular examinations

These are written examinations, each on a different aspect of beekeeping, and will be held in March 2022. LBKA usually offers tuition to members wanting to take one of these examinations and will continue to do so this winter. The support offered depends upon the number of people who intend taking a particular module (there are 7 modules in total and I will offer tuition for 1 module, depending upon the interest). A lot of information is on the BBKA website. Anyone who is interested in developing their beekeeping knowledge by this route should first look at the BBKA website under the education section. There is a lot of information including a FAQ factsheet. Simply enter "module" in the search engine on the website. Then contact me by email on education@lbka.org.uk to register your interest. I will then communicate directly with you. People who have taken the Basic in 2021 may be particularly interested in pursuing this.

Please note that a certain amount of commitment is required, both by me as tutor and the candidates. It is not something that can be decided and pursued at the last minute. Those who may be interested should contact me now so that we can consider what options we all have.



Huge European hornet found in East Dulwich. Photo: Annie McGeoch.

LBKA Microscopy Course: Anatomy of the honey bee and pollen analysis

LBKA proposes to run a detailed microscopy course for interested members during the winter months. This is the 7th time this will have been run by our association and is likely to be 3 × 2 hour evening sessions organised and led by Richard Glassborow and Howard Nichols. It will concentrate on the use of microscopes for members to learn about both the pollen grain structure and the internal anatomy of the honey bee. It will be mainly hands-on practical work and over the 3 weekly sessions we expect to deal with the following:

1. Simply theory of lenses, setting up of optical instruments and a summary of terminology used.
2. Investigation and analysis of pollen grains. How to prepare a slide. Use of negative and positive stains. Internal and external structure of a pollen grain and its features.
3. Embedding and dissection of the honey bee.

Item 3 is expected to form the major part of the course with 2 full sessions covering this subject. Embedding, dissection of head, thorax and abdomen will all be separately dealt with. Did you know that a mammal is pinned on its back for dissection but a bee needs to be pinned face downwards?

- All equipment will be supplied by LBKA
- Numbers must be limited to a maximum of 8 people due to availability of equipment and pupil / teacher ratio.



Stephen on queen rearing: "I let queens emerge in cages once because I wanted to verify that they were viable before making up nucs for them. People suggest giving them a few drops of honey in the bottom of the cage so they can eat when they emerge, and also to not leave them in the cages without attendants and longer than necessary". Photo: Stephen Wheelwright.

- There is no charge. It is part of your LBKA membership subscription.
- Date to be decided but will be 3 evenings at Walworth Garden Farm in January or February 2022.

Please note this course is open to all LBKA members. The only entry requirement is an interest (and being a member). Although specialised in form it is for anyone interested or curious about these aspects of beekeeping. Microscopy and dissection are "niche subjects" and so equally accessible by both very new and longstanding beekeepers. It is not dependent upon length of beekeeping experience. Beekeepers in their first year enjoy this course just as much as older beekeepers. It is truly a fascinating sub-optical world and exploration is an adventure.

Due to the organisation involved we need to have an idea of those interested so that the sessions and content can be properly planned. Please register your interest by email to education@lbka.org.uk as soon as possible. This does not require you to commit at this stage but attendees are dealt with on a strictly first come basis. In the past demand usually exceeds the 8 available places very quickly, sometimes within 72 hours of the newsletter being circulated.



Fly on mahonia. Photo: Eugene McConville.



Lavender-scented candles. Photo: Lucie Chaumeton.



"I started this batch exactly one month ago. Followed a staggered nutrient addition schedule, racked twice, stabilized with potassium sorbate and backsweetened to be sweet (1.024). It's still very young but quite drinkable. 17% ABV". Photo and caption: Stephen Wheelwright



Lip balm. Photo: Adam Armstrong.

December in the Apiary

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

Howard Nichols
education@lbka.org.uk

December is a quiet time for beekeepers but an eye must still be kept on the apiary. Most items detailed in the November newsletter still apply and are not repeated here. However, one important task is needed is the application of Oxalic Acid some time in December.

Oxalic Acid

Oxalic Acid only deals with mites on the adult bees and so must be applied when the colony is broodless or virtually broodless. Mid to late December is the usual time for treatment. Leaving it until mid January is not recommended as the queen will be laying by that time. Also, administering the acid does set the colony back a little and it needs time to recover before spring gets under way. We have had a cold spell of weather in late November so I anticipate administering my own colonies about 3 weeks later which will be circa 18th December. I will choose a cold day (or early in the day) when the bees are clustered. Although referred to as a "soft varroacide" this is a little misleading. Misapplication can be harmful to the bees and/or beekeeper. We are now unable to use the pre-made solutions and so must make up our own. It is a strong chemical and manufacturer's instructions should be followed explicitly and all safety precautions strictly adhered to. This

is for the beekeeper's safety (do not inhale the powder) as well as the safety of the bees. Please keep the chemical away from children and carefully dispose of unused contents after use.

Woodpeckers

Woodpeckers may start to be a problem, although this is usually more of a problem in January and February. It is the Green Woodpecker, *Picus viridis*, which is the main culprit. As the ground becomes harder due to the cold they find it more difficult to dig for insects and can turn their attention to a beehive. I have been fortunate so far in that I have not had this problem with my hives.

Mouseguards

Check behind the mouseguards for a build up of dead bees, etc. Clear out if necessary.

Water

Ensure there is a water supply close to the colony. Bees become immobilised and die when the body temperature falls to or below 7°C. They will make quick flights at outside temperatures below 7°C for toilet purposes or to bring in water. They do this by warming their bodies up beforehand then making a dash for it and returning to the hive before they cool down. The nearer the water supply the better.

Moving the colony

If it is essential to move the colony less than 3 miles then winter is the preferred time. It is better to do this when the weather is forecast to remain cold for at least a week.

Education

Winter is a good time to read your bee books. Even better is to download the Basic syllabus from the BBKA website with a view to taking the exam next summer. The LBKA is also running a Module 1 course this winter. Winter reading is a useful beekeeping bridge between seasons.

Review the year

Review the year. What have I got right? What mistakes have I made? How will I approach my beekeeping next spring in the light of this review? Rather than just letting the bees react and me follow it is more constructive to formulate a beekeeping plan for the following year. The bees may decide differently and it may become more challenging but it is worth thinking through a strategy. The plan could even be as simple as producing more honey. This may require some additional equipment and now is the cheapest time to buy.

I hope each and every one of us has a pleasant and peaceful Christmas, regardless of how we may choose to spend it. Hopefully, your colonies will have a very low varroa count by the end of the month and they will be in a stronger position to commence the spring build up in 2022.

Last month's Monthly Meeting: Oxalic Acid treatment.

What happened at our meeting last month.

We recorded the meeting and members can [access the videos on our website](#).

We need volunteers willing to help write these sections. Please contact services@lbka.org.uk if you may be able to help.

Recovering wax from cappings (or how to make wax soup)

An ingenious way of recovering old solidified wax.

*Geoff Hood
LBKA member*

When I first started beekeeping and only had one hive, I used give the wax capping leftovers back to them for the bees to clean. It was easy as the bees did all the work and all that was left was a little bit of wax on top of the crown board. However, I now have rather more hives than just a single hive. This means I get several buckets of wax cappings every year. It is difficult to keep track of which hive – even apiary – each set of wax cappings comes from and it is unwise to feed a mixture of wax cappings to different hives and apiaries as I do not wish to contaminate clean hives with European foulbrood disease from another apiary.

That means I collect three or four buckets of wax cappings every year. Now, if I was efficient, I could wash the cappings immediately in water, make mead with the wash water and extract the clean cappings later in the year. However, what happens is I put the lid on the bucket, and they stay hidden behind the water butt for the next couple of years. The result is a bucket of a solid honey mixed with wax cappings, which is almost impossible to get out of the bottom of the bucket.

Talking to my cousin who is a beekeeper in Durham she explained her method of solving the problem. It is quite simple. You just fill the bucket with rainwater and add two table spoons of organic unfiltered vinegar



Bucket of old wax cappings and honey hidden behind the water butt.



Solid honey that's turned to vinegar water.



Two buckets seeded with SCOBY in warming cabinet.



The jam pot.



Pot filled with cappings.



Almost melted.



Starting to melt.



Taking off the melted wax.



Filtering wax through nappy liners.



The debris floats to top.



Fresh wax in soup containers.



The pollen needs scraping off the bottom.



Working on the patio.



Large amount of debris on the underside of the final wax that set over-night.

– preferable cloudy – with some of the sediment from the bottom of the bottle. So this year I tried it on three bucket of four year old cappings. However, instead of vinegar, I used a symbiotic culture of bacteria and yeast (otherwise known by its acronym SCOBY) given to me by Lucie Chaumaton to make kombucha, a fermented tea drink.

After two months I opened up the buckets to find all the solid honey was gone, the SCOBY had turned the honey and water to acetic acid (vinegar) leaving just wax cappings and a few dead bees. I have since added more SCOBY to other buckets but have placed these in my warming cabinet at 40°C for the SCOBY to do its work in this cold spell.

To recover the wax I place the cappings and most of the vinegar water in a large stainless steel pot – don't use an aluminium pot as the wax goes grey – and heat it outside on my patio with a one kilowatt electric hob – don't use a camping gas cooker as the beeswax has a low flash point (been there, done that, got the singed eyebrows).

Once the wax has melted, it floats to the top. However, it is dirty, because the bees add pollen to the wax when capping the honey. When you are processing a lot of wax there can be at least an inch of pollen underneath the wax. You can either scoop off the cleaner honey from the top of the pot into a tall container or you can let the wax set in the pot. Once set you can scrape off the pollen from the bottom of the wax. The method I use is to take off a few jugs of wax and add more wax cappings to the pot. If you place the molten wax

into tall containers (I use soup pots) then any debris that floats (dead bees etc) will rise to the top and can be scrapped off and Pollen will fall to the bottom and again scrapped off. The wax scrapings can be recovered by placing back into the pot. Once I have done several buckets of wax cappings, I let the pot cool down for at least 24 hours. You then have a solid piece of wax that is extremely dirty. But the pollen can be scrapped off the wax which can be reheated and cleaned and filtered through a fine cloth or nappy liners. If I am making candles or homemade foundation then I will filter all the recovered wax twice through lint or double nappy liners. However, if I'm exchanging it for sheets of foundation with Thornes or KPS of Hastings I will only filter it once as they will filter it on their wax recycling machines.

The last two filterings are not done in the big pot, but are done in a bain-marie, because heating the wax to a high temperature will darken the wax. Wax cappings produce the finest cream coloured wax if processed correctly.



Clockwise from top left: using the thermometer, pouring into moulds, honey-lemon lollipops, propolis throat soothers with some lighter honey-lemon sweets.

Recipe: Simple honey sweets recipe

Lucie's delicious honey sweet. Perhaps they'll make a perfect Christmas present for someone?

Lucie Chaumeton
LBKA member

Honey-lemon lollipops are always a big hit with kids at school and other fairs. Using a different mould, the same recipe will yield pretty sweets which, with the addition of propolis and/or ginger, have also proved a hit with adults this winter when sold as "throat soothers".

Equipment

An accurate cooking thermometer is absolutely essential (also super useful for setting jam at 103.5°C).

Your cooking pan should have a lid.

For lollipops you will need silicone moulds and paper sticks. For sweets you only need silicone moulds. The ingredient list will produce 12 lollipops plus a few heart sweets or about 42 small heart sweets. Packs are available online for about £15 which include lollipop moulds, sticks, wrappers and ties. Selling lollipops at 50p a piece, this is amortised after 2 batches.

For packaging, I have used small cellophane bags (5x7cm for sweets or lollies, 5x5cm for lollies) and ties, but small tins with clear lids are also very pretty, or small

glass jars. Any packaging must be airtight though, or sweets will go sticky from ambient humidity.

A small amount of glucose powder is key to giving the sweets the correct hard consistency – this is the only ingredient that may not be readily available at your local grocery store, but it is cheap to buy online and you do not need to purchase a large quantity.

You can use bakers' honey instead of your best raw honey, as it will be heated anyway.

Ingredients

- Sugar: 225g
- Water: 75g
- Honey: 1 tablespoon
- Glucose powder: 7g (one heaped teaspoon)
- Lemon oil: $\frac{1}{2}$ teaspoon
- Ginger (optional): $\frac{1}{4}$ teaspoon
- Propolis (add for throat soothers): $\frac{1}{4}$ teaspoon

Method

Adequately prepared, this should take about 20 minutes per batch:

1. In a small pan, weigh 225g sugar and 7g glucose, stir together in case the glucose is lumpy, add water to a total weight of 307g.
2. On a plate, prepare your spoonful of honey, and other ingredients ready to add at the last stage
3. Have a mug of hot water ready with a couple of teaspoons in it next to your cooker, as well as your thermometer, and a timer
4. Lay out your moulds ready for use
5. Heat the pan on a very low heat (4 out of a possible 15 on my induction cooker) stirring frequently until all sugar crystals are fully dissolved. Test for this by looking at the back of the teaspoon you are using to stir, replacing it in the hot water mug between uses. The solution should not boil at this stage.
6. Once sugar is fully dissolved and solution is clear, bring to the boil (8 out of 15 on my cooker) for 3 minutes (use a timer), with a lid on
7. Remove the lid and boil a little harder (I go up to 9-10) monitoring constantly with the thermometer until a temperature of between 149-150 degrees C is achieved. This typically takes less than 5 minutes and the last few degrees only take about a second each, so do not leave unattended at this stage and be ready to proceed quickly with the rest.
8. Remove from the heat source as soon as the temperature is reached, or sugar will start to discolour. Immediately add the lemon essence and honey, and other ingredients if used. Swirl your pan around a few times and they will quickly mix and dissolve. Do not be tempted to stir, as whatever implement you use will bring the temperature down and reduce your pouring time
9. Quickly pour into moulds. Do not worry about

small spills as you can always eat them when they've hardened – they will be easy to separate.

10. Leave to harden and keep dry until wrapped.

Tips

One batch will make 12 lollipops or about three small trays of heart sweets. The heart sweets are rather large if you fill up the mould completely, so it could be a good idea to make smaller ones by only half-filling each heart shaped-mould. A lot of sweet moulds are sold for making chocolates rather than boiled sweets.

Do:

- Keep the room you're working in dry – excess moisture in the air will make the sweets sticky. If making them on a wet day keep windows closed and/or switch on the extractor fan
- Use hot water to dissolve hardened leftovers on your pan and utensils – they will look horribly sticky but there is no need to scrub hard if you use boiled water.

Don't:

- Attempt to make double/treble batches as the mix will harden before you are finished pouring it

Labelling for sale

If you are selling your sweets, don't forget to use all the same Food Safety principles you would use for your honey, including having a label stating ingredients, batch number (keep a record thereof), BBE date and the address of production.

Enjoy!

The Bees that make Christmas

We're wheeling out Mark's festive tribute to bees, a tradition for our December newsletter.

Mark Patterson
forage@lbka.org.uk

The Christmas Wreath

Christmas wreaths predate Christmas and Christianity by several thousand years. Originally ancient Britons and other northern Europeans would have made loose hanging wreaths (basically just a bundle of greenery tied at the top and hung from the walls of their home) as a means to ward off winter spirits. It is only later with the rise of the Christian churches that wreaths adopted a circular shape mirroring the crown of Christ. Our ancestors believed that evergreen plants were magical because unlike other plants they didn't die back



and shed their leaves in winter. Additionally many evergreen plants like **holly** produce long lasting berries which were a symbol of life and fertility. Plants like **ivy** whose berries persist long into winter as well as being evergreen climb and entwine representing matrimony and togetherness. Strongly scented sprigs of conifer would have hidden the foul odours of winter (no fridges back then, so perishable foods would not last long even when dried and salted and would produce a pungent smell)

Key items used in wreaths include holly (*Ilex aquifolium*) which is pollinated by honeybees as well as Andrena mining bees whose short tongues are well equipped to manipulate the strongly scented but visually insignificant flowers. Ivy flowers are pollinated by a wide variety of insects and are a valued autumn forage source, but it has its own special pollinator, the Ivy Mining Bee (*Colletes hedera*) which only collects pollen from ivy and times its emergence to the opening of the ivy flowers.

Christmas candles

Candles bring warmth and festivity to the home at Christmas. It's not just the wax used to make candles which comes from bees, Christmas candles are often scented with festive spices such as **vanilla**, **frankincense** and **myrrh**. Vanilla comes from the pod of a tropical climbing orchid and is pollinated by stingless Meliponini bees whilst frankincense and myrrh are both derived from the resin of exotic trees native to the horn of Africa. These trees are insect pollinated and visited by bees.

Turkey

You may be surprised to learn that turkeys need the assistance of bees to even exist. turkeys in the wild are omnivores feeding on a variety of seeds, fruits and invertebrates which exist in a natural food web reliant on bees and other insect pollinators to assist plants at the base of the food chains.

Domestic turkeys live on large farms and are fed on a ration of poultry pellets made up predominantly of **maize**, **wheat** and other **cereals**. These pellet foods also contain significant quantities of soya and or field

peas as a source of protein. These are both legumes highly reliant on Megachile and Osmia bees for pollination. In addition free range turkeys will graze and forage on fields of flowering crops and among orchard fruit trees where they can peck at fallen apples. These crops are heavily reliant on honeybees, Andrena and Osmia bees for pollination.

The Stuffing

No turkey would be complete without stuffing.

Stuffing typically contains **onions, herbs and spices** all pollinated by bees.

The Onion Yellow Faced Bee (*Hylaeus punctulatisimus*) collects its pollen exclusively from onions. Still common in parts of continental Europe this species is sadly thought to now be extinct in the UK. London appeared to be the species' last stronghold in the UK prior to its extinction and the last specimen was seen foraging on cultivated onions in a Chelsea garden in 1827. In the US a small mining bee called *Andrena prunorum* is one of the most efficient pollinators of commercially farmed onions.

Roast Carrot and Parsnips

As root crops, these vegetables don't require pollination for us to enjoy the vegetable itself but pollination by bees is required for the seed growers to produce seed each year to provide to the growers. Parsnips are pollinated by many small solitary bees from Andrena, Colletes, Hylaeus, Nomada and Lasioglossum species. Hoverflies and pollinating beetles also play a significant role in pollinating these vegetables. Larger pollinators like honeybees and bumblebees are poor pollinators of these crops. Carrots such as parsnip are visited by a variety of small solitary bees but also have their own special pollinator: the Carrot Mining Bee (*Andrena nitidiuscula*) which is solely reliant on carrot for pollen to feed its offspring.

The Roast Potato

The humble **spud** has been a winter staple in the UK since the late 1600s when the Spanish brought it to Europe from the Andes. It is the world's fourth most eaten foodstuff. Potatoes roasted in goose fat have become a Christmas tradition. The part of the plant we eat is the tuberous root and not a pollinated fruit as with other Solanum crops but bees are necessary to breed new varieties of potato. Potatoes belong to the Solanum family and have flowers bearing cylindrical pollen-holding apparatus which very few bees can access. In order for the flowers to shed their pollen they must be sonically vibrated at a specific frequency. Bumblebees and a select few solitary bees have evolved the ability to do just this by revving their flight muscle to vibrate their bodies.

In the Americas, solitary *Anthophorula* and *Exomalopsis* bees work alongside native bumblebees to pollinate wild Potato whilst elsewhere in the world commercially-

reared Buff Tailed bumblebees are used to pollinate breeder plants.

Cherries

Cherries are an important ingredient in the traditional Christmas pudding and pollinated by a variety of bees including Andrena Mining bees, bumblebees and Mason Bees. The Red Mason Bee (*Osmia rufra*) is particularly important in the pollination of UK cherries. Honeybees are often used commercially to pollinate cherries but are not very efficient at pollinating early flowering varieties which often bloom when the temperatures are too cool for honeybees to venture far from their hives.

Christmas nut mix

Brazil nuts are pollinated by colourful Orchid Bees of the *Euglossini* genus. The females of these bees pollinate a variety of tropical plants as they collect pollen to feed their offspring. The males pollinate orchid flowers which they visit to collect scented secretions which they use to attract the females, hence their common name Orchid Bees. Only Euglossini and larger Carpenter bees of the *Xylocopa* species can access the flowers of Brazil nut trees as a robust body is needed to force entry into the tightly lipped flowers.

Almonds are pollinated by honeybees, bumblebees and Osmia Bees such as *Osmia cornuta*. Almonds are the single biggest export of the US state of California which grows over 90% of the world's crop, around 810,000 acres in vast orchards in the Central Valley. Each year 81 billion honeybees from 1.6 million hives pollinate over 2.5 Trillion Almond blooms in what is the largest insect migration on the planet. Beekeepers truck these bees from all across the United States on 6000 lorries.

Apples and Oranges

Ancient Britons gave sacrifices of apples and oranges around the time of the winter solstice. The ripe fruit were the colour of the sun and a symbol of the return of spring and warmer weather which brought relief to the cold northern winters. It is traditional to hang dried apple and orange slices in the home around Christmas and they are used in mulled wine. Whilst honeybees are used to pollinate commercial apples by far the most efficient pollinator of apple trees is the Orchard Mason Bee (*Osmia lignaria*) which is so much more efficient at pollinating Apples that just 300 female bees can perform the pollination role of 90,000 honeybees.

Oranges are pollinated by a variety of bees and commercially are reliant largely on honey bees and bumblebees. Whilst some varieties of citrus are self-fertile and capable of pollinating themselves without bees, fruit set and yields are greatly improved by the presence of bees.

Christmas Sprouts

Leafy vegetables in the cabbage family which include Collard Greens, cauliflower, sprouts and broccoli fea-



ture heavily in Christmas feasts and are pollinated by a variety of insects including bees, beetles, hoverflies and lepidoptera. Though the parts of the plant we eat are not reliant on pollination, bees are required to produce seed from which the crop is grown. In the UK farmers often rely on managed honeybees for pollination but there are a number of solitary bees which are also efficient pollinators. Recent research suggests that wild bees and not honeybees are actually our most important pollinators of these crops.

Roast Chestnuts

The smell of chestnuts roasting on an open fire is a sure sign that winter and Christmas have arrived. Chestnuts can be boiled or roasted and are often used in stuffing mixtures. Many British bees visit the flowers which communicate to the bees by means of a visual colour change to the petals to inform the bees when the individual blooms have been pollinated and the nectar exhausted.

Cranberry

No turkey dinner is complete without cranberry sauce. Several species of wild bee are commercially important in the production of cranberries which are mostly grown in the northern USA and Canada. This fruit requires 'buzz pollination' which only a select few bees are capable of achieving. Among them The Rusty Patch Bumblebee (*Bombus agrorum*) and the solitary bee (*Megachile addenda*) but it is the Cranberry Melitta bee (*Melitta americana*) which is most important in the production of commercial Cranberries. The Cranberry Melitta

feeds its offspring exclusively on cranberry pollen and is often the most numerous wild bee on large cranberry farms. Unlike the honeybees which are shipped in to pollinate cranberry fields these bees are flower-faithful and therefore are far more efficient at pollinating the cranberries. The honey bee is incapable of buzz pollination and inefficient at pollinating cranberries. When introduced to fields to pollinate cranberries the crop must be saturated with hives to make up for the inefficient pollination which can then push out the more efficient wild bees.

Best of Bee Banter

Janet has waded through last month's Bee Banter, distilling the things that catch her eye.

Janet Evans
LBKA member

This month we saw a continuation of some of the October themes, with variations, but some interesting and new experiences.

Feeding issues, insulation and condensation

Now we are into November I was thinking about fondant and it occurred to me to ask, if bees use the fon-

dant or if they make it into honey and store it. A quick response came – the answer is the bees do both, but in November they are likely to use it if they need to, rather than store it. As I mentioned last month, one question hatches a few more. So the where, when and how to place the fondant quickly followed, should the fondant be placed on top of super frames or on top of the brood frames with a super to allow for the extra depth required? Several beekeepers place the fondant on top of the crown board in a ziplock bag, with a slit in the bag so that the bees can access it easily.

But placing fondant or insulation on top of the frames or crown board takes up space, the roof won't fit neatly so one beekeeper asked "I have placed fondant flat on top of their super, but it sticks up too much to get the crown board and roof on. So I have a second super on top. I'm worried this is just too much airy space for them over winter to be warm enough. How do others squeeze fondant in? And insulate?" Such a variety of answers: one uses gable roofs, one places an extra super on top with the fondant on the crown board so that there is space for the insulation on top, which means there the airflow is not blocked and this should mean less or no condensation.

Insulation options offered also varied – common or garden builders' block or even the Harrods' food bag insulation wrap used by one beekeeper. That particular hive must be providing a lucrative crop of honey if Harrods shopping is the norm! Mine of course, is the most modest Morrisons' delivery insulation, which I saved, from an early Covid lockdown delivery, in the sure knowledge that it would be useful for something. But keep your eye out for builders' insulation, it can be found in skips all over London; cut it to size and it can be used for insulating your wax warming equipment too.

Pests, diseases and inspections

This month varroa continued to demand attention. Steven investigated his colonies and discovered, as he had previously heard "that late November, early December is the most likely time for hives to be broodless here." He wanted to see for himself, so he opened up two 6-frame poly nucs and inspected the frame in the middle of the cluster. Both hives were completely broodless. He treated them with oxalic acid on the spot and would do the same for his other nucs. Many experienced beekeepers would be unlikely to advise opening up when the temperature was only 1°C outside the hive. Clearly there is more room for discussion on this and next month I am sure people will post more about oxalic acid treatment.

A very concerning outbreak of EFB was reported very late in the season. It generated an interesting discussion on hive inspections late in the year. This case of EFB appeared to jump many miles in no time at all. The mystery, how anyone would find a case of EFB so late, was solved by our regular contributor from North London, who explained he had suspicions that a sudden drop in colony size of a beginners' hive may be due to

EFB. It was his lateral flow test kit, used by the Seasonal Bee Inspector that proved the case. Sadly another colony and hive equipment destroyed to try to contain the spread of the outbreak. Worryingly, it may mean that there are other hidden cases lurking late in the season and may result in resurgence in the spring.

Honey and bees legs

The all-important product does occasionally get mentioned on BeeBanter, often when someone comes across something surprising or unusual. This month it was a jar of unfiltered honey containing bees' legs, along with added pollen, that generated a flow of comments. Beekeepers may be unaware that BBKA insurance doesn't cover adding pollen or anything else to honey. Maybe the bees legs are allowed as they may come along with the honey! But adding anything else such as flavours or rose petals mean the beekeeper needs producer's insurance, and may need a hygiene rating to process food. Extremely useful advice, alerting us newer beeks to investigate the legislation thoroughly if we intend to process our honey

Wax cappings and the inevitable messy winter work

One member noticed that Richard had a quick and easy way of dealing with wax cappings – ie NOT having wax cappings! Richard explained: use a heat gun quickly across the super frame where there is freshly capped honey. The cappings miraculously disappear into the cell walls. Given that I joined Geoff and several of his mentees one day learning about wax recovery it sounds too good to be true. Apparently it needs freshly capped honey, doesn't work if the heat gun is not hot enough, or if the frame is only partially filled, or if it is full of rape seed honey. Clearly an educational video is required; with plenty of health and safety warnings! It does sound fantastic and the answer to all that melting, pouring, straining and processing that goes on in the winter months when beekeepers seem to have "nothing" else to do!

I wonder what good natured discussion will get members tapping away on their phones next month.

Members' marketplace

This section is for members offering beekeeping items or services to members or requesting items. Items could include nucs, wax and honey. Email services@lbka.org.uk to add something here.

Upcoming events

Sunday 12th December: Monthly meeting: Christmas Quiz and Social

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

Elliot will be the quizmaster with contributions from Howard and others. You will also need a smart phone or tablet on which you can install the "Speed Quizzing Live" for [Android](#) or [iOS](#). The app is free, but make sure it is the 'live' version of the app which is an orange colour rather than the blue version.

Sunday 9th January: Monthly meeting: Pest and diseases

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

A roundup of what we should be aware of in the coming year in terms of pests and diseases.

Saturday 15th January: Winter lecture: How modern beekeeping enhances nectar competition and contributes to species extinction of wild pollinators

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

This is a repeat performance for Torben Schiffer, (National Honey Show 2021), from the Julius Maximilian University of Wurzburg. It may be a contentious subject for us, but fits well with LBKA's exploration of The London Situation and desire to discover truly sustainable beekeeping models.

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 <http://www.lbka.org.uk/> and the pictures are in the same order as the names above.

