



The London Beekeepers' Association LBKA News

November, 2020

Welcome to the final newsletter before the AGM! In the coming month we have a Monthly Meeting, the AGM, our second Winter Lecture and the final Pub Social of the year.

As well as regular contributions from Richard (p1), Howard (p4), Mark (p8), we have some thoughts on DEFRA's new "Healthy Bee Plan" from Simon (p5), a guest (Halloween) blog post from Mark (p9) and a reprinted article about insulating hives (p6).

You'll see a few gaps in our regular contributions. If you can help with any of these (not necessarily every month) please drop me line. We'd welcome contributions from more members. Do email me if you can contribute anything including articles, photos and recipes.

From our Chair	1
Announcements	2
November's Committee meeting	4
Last month's Monthly Meeting	4
November in the Apiary	4
Reflections on DEFRA's "Healthy Bees Plan 2030"	5
Thermoregulation and insulation	6
Banter (In)digest(ion)	7
Focus on Forage	8
Guest Blog	9
Members' marketplace	9
Upcoming events	10
Committee	11

A big thank you to this month's contributors: **Richard Glassborow, Martin Hudson, Eugene McConville, Howard Nichols, Mark Patterson and Simon Saville**. Would you like to join these esteemed contributors? If so, do contact me.

Happy beekeeping.

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

From our Chair

Richard Glassborow
chair@lbka.org.uk

Next Wednesday, November 11th, we hold our AGM which is a kind of marker of the Association year.

Just pause a moment to reflect...

... and now here we are back in lockdown, only this time will be different because the days are shorter and the weather is unlikely to be quite so kind. But, is that going to stop us thinking about, talking about, and devouring books and internet content about bees? Unlikely! Make the most of it because in 2-3 month's time the bees will be back! If you are in a boat in stormy seas it is good to keep your eyes on the horizon, it stops you getting seasick.

Meanwhile, in adapting to living and working with Covid, I dare to suggest we are discovering there are



Ivy can be a dangerous place to hang out. Photo: Eugene McConville.

some advantages in being forced to change old ways. It is making us think, which is never a bad thing. And I think an open mindset is timely for the LBKA having just come through a frankly shocking year for EFB we need a rethink on managing disease and this also turns up the spotlight on colony density because there seems to be a link.

That process is underway and at the AGM we will be discussing further steps begun with the debate on our London Bee Situation report in July. Our own findings have been endorsed by the Kew paper I wrote about last month and that paper is attracting quite a bit of attention amongst the beekeeping community.

Meanwhile Defra have just launched a [Healthy Bee Plan 2030](#). At first glance this looks like a good thing but unfortunately it contains a considerable amount of sloppy, old-school thinking, over stating the role of honey bees in ecological services and failing to recognise the complexities of managed honey bees within biodiverse ecosystems. I won't be surprised if this doesn't bring more "save the bees" trouble to London. See Simon's take on [p5](#).

On a decidedly bright note, the following week, Wednesday 18th, we have another winter lecture. This time by Professor Ollerton who really does know his stuff on pollinators and pollination. He is a good speaker too and I recommend you keep the evening free to hear him. I eagerly await [his book due out next month](#).

Finally, I hope your bees are all tucked up for the winter. I hope you are all keeping well and I hope to see you at our monthly meeting on Sunday.

Stay well.

Announcements

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

November's online Monthly Meeting and Pub Social

This month's Monthly Meeting will be on **Sunday 8th November** on "Hygiene Matters: the end of season cleanup", led by Richard. This will be on the usual Monthly Meeting Zoom link in the [Members' Area](#) and in your email.

December's Monthly Meeting will be an exciting online Christmas Quiz on **Sunday 13th December**.

Our **Pub Social** will be via **Zoom** again on **Tuesday**

24th November from 18:30 (Zoom link in the [Members' Area](#) and in your email).

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 are **very easy** to do.

We hope that you wish to remain being part of LBKA. We rely on a large and active membership to enable us to do our work in helping promote better urban beekeeping, helping us influence policy, helping with our outreach and education work, and helping build a supportive beekeeping community. If you didn't get the email, please check your spam folder or email services@lbka.org.uk.

If you're not sure if you are a member, try logging into the [Members' Area](#) (you'll probably need to reset your password). If you can, you're a member.

Consider joining our "Bee Banter" WhatsApp group

Our "Bee Banter" WhatsApp group for LBKA members has an interesting and useful mixture of questions, answer, thoughts, experiences, good practice and articles. Sometimes members do impromptu zoom beekeeping session that are announced here. Members should **consider signing up**. The join link is in the [Members' Area](#) and in your welcome email and **you can turn off notifications, if the traffic become too much for you**.

Contribute to the Newsletter

You'll see a few gaps in our regular contributions. If you can help with any of these (not necessarily every month) please drop me line. We'd welcome contributions from more members and would love it if you could propose a new regular feature. We usually end up with 300 or so members and the newsletters are [available to all on our website](#). Do email me if you can contribute anything including articles, photos and recipes.

We're looking for members to summarise the issues discussed in a digestible way. Please contact services@lbka.org.uk if you may be able to help in some months.

Annual General Meeting (AGM)

The Annual General Meeting (AGM) will be on **Wednesday, 11 November** - details will be in your email. Please try and attend this meeting, to elect charity trustees, help direct the work of the London Beekeepers Association and continue to discuss the steps we should be taking in the light of the London Bee Situation report we circulated and discussed earlier.

Winter Lecture: Pollinators & Pollination: Nature and Society

Our second Winter Lecture will be on **18 November at 18:30** via Zoom, and will be delivered by Professor Jeff Ollerton, Professor of Biodiversity at the University of Northampton. That lecture will be titled "**Pollinators & Pollination: Nature and Society**". Put in your diary (link will be emailed nearer the time).

These winter lectures are an opportunity for members to hear about subjects, (often peripheral to day-to-day beekeeping), from experts in their chosen fields, as well as a bit of a social occasion – though socially distanced, this year at least. These lectures are paid for by LBKA subs and are free to all members, and it is hoped that a sizable audience will attend, provide feedback, and influence the selection of topics and presenters for other lectures later this winter. Invitations to the zoom lectures will be emailed to all LBKA members 24 hours before the start time.

Honey for sale?

Ask service@lbka.org.uk if you'd like it to be added to our honey page.

Old announcements from October

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

BIBBA: The Bee Improvement and Bee Breeders Association (BIBBA) have a programme of talks that are [free to sign up for](#).

Old announcements from September

Beekeeping opportunity in Camberwell: A retired lady has asked whether a member of LBKA would like to take over her bees saying that "it would be an opportunity for someone without bees to find out what it's like to run an apiary". If interested, please contact Simon Saville on 07572 612722.

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.

NNSP
EU non-native species coordination

Produced by Lucy Curwood, Cliff Booy (NNSP), Guy Stans, Mike Brown (National Bee Unit) with assistance from Colette O'Brien (National Biodiversity Data Centre) and Stuart Roberts (NNSP)

Asian Hornet **Alert!** Report sightings of this species to: alertnonnative@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 tipped legs. Smaller than the native European Hornet.

Introduced to France in 2004 where it has spread rapidly. In 2016 the first UK sighting was confirmed in Gloucestershire. High possibility of introduction through, for example, soil associated with imported plants, cut flowers, fruit, garden items (furniture, plant pots), freight containers, or air on unbranded 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 alertnonnative@ceh.ac.uk.

Key ID Features

Asian Hornet Queen
Queens up to 30 mm, workers up to 25 mm long
Entirely dark brown or black except for yellow legs and a fine yellow band on the 4th segment
Legs brown with characteristic yellow ends
Asian Hornet abdomen is almost entirely dark except for 4th abdominal segment
Asian Hornet hovering for honey bee prey

Similar Species

Asian hornet (*Vespa velutina*) for comparison Actual size

- 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
- Entirely black velvety thorax
- Never active at night

European hornet (*Vespa crabro*) Actual size

- Queen up to 35mm 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

Giant woodwasp (*Dacnusa gigas*) Actual size

- 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

Hornet mimic hoverfly (*Volucella zonaria*) Actual size

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

Median wasp (*Dolichovespula media*) Actual size

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

Field Signs

Active April–November (peak August/September). Mated queens over winter singly or in groups, in various natural and man-made harbours – 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 (gargles, sheds etc.) as nesting sites.

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

Alert! Report sightings of this species to: alertnonnative@ceh.ac.uk

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

November's Committee meeting

Here, we keep you up to date with what the committee discuss 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 the final meeting before the AGM we reviewed the process of Trustee self-assessment, made final arrangements for the AGM, reviewed the Trustees' Report, considered the "London Bee Situation" and a proposal for LBKA's offering to its members in a Covid world.

We then turned to more operational matters, discussing the Winter lectures update, an online Christmas Quiz, an update on School Food Matters and a review of our accounts.

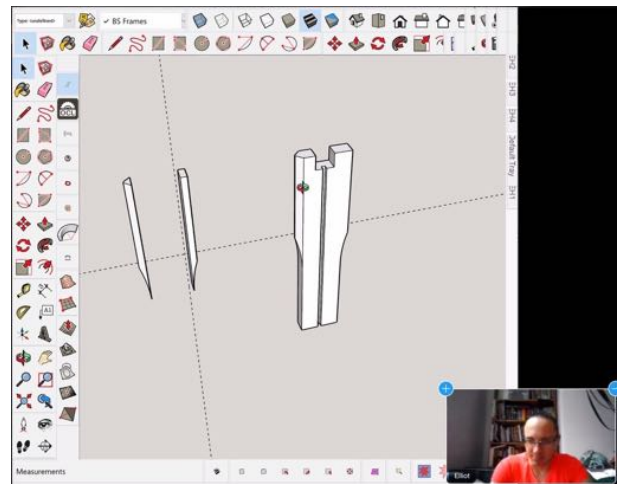
Last month's Monthly Meeting: Hive assembly, frame assembly and timber properties

What happened at our meeting last month (reprinted from last month). *We need volunteers willing to summarise what went on at the previous Monthly Meeting. Please contact services@lbka.org.uk if you may be able to help in some months.*

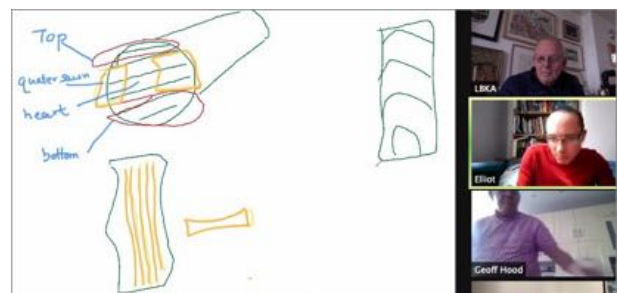
Richard Glassborow
chair@lbka.org.uk

With characteristic expertise and thoroughness, Geoff Hood gave a much needed demonstration of how to assemble a flatpack hive.

Elliot Hodges demystified the arcane world of frame parts (a subject I have never got my head around) and then proceeded to demonstrate there is no limit to where beekeeping can take us with an absorbing session on the moisture content of wood and how the way



Elliot explaining the differences between different types of side bars on frames.



Elliot explaining about some of the properties of wood.

logs are planked will determine how wood is likely to 'move' as the moisture content changes.

Our thanks to both.

November in the Apiary

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

Howard Nichols
education@lbka.org.uk

November is a fairly inactive month for the beekeeper. However, a certain amount still needs to be done.

Tidy up. Tidy up the apiary if not already done. Any long grass around the hive should be cut back and overhanging branches pruned. Complete cleaning, sterilising and storing of equipment if not already done.

Check for wax moth. Check stored supers for evidence of wax moth infestation. The lifecycle of the wax moth is substantially different to that of the honey

bee. A wax moth egg is temperature dependent and able to stay as an egg then hatch after a few weeks or months. Supers should be stored in a cold and draughty place if possible but also checked during winter. If any evidence of wax moth is found the best way to deal with it is to place the frame(s) in a deep freeze cabinet for 48 hours. This will kill the pest in all 4 lifecycle stages.

Plan for December's varroa treatment. December is the usual month for treating the colony with Oxalic Acid. Monitoring natural mite drop in November is a useful diagnostic tool and precursor to actual treatment next month. Insertion of the varroa floor for 1 week in November will give useful information to the beekeeper. If Autumn treatment with Apiguard or other such authorised product was successful then mite drop should be very low. If mite drop is high then the treatment has not been as successful as anticipated and the beekeeper should re-evaluate the Autumn methodology.

Check the hive is secure. Check the hive is secure and that the roof cannot blow off or be dislodged. Placing of heavy items such as a couple of house bricks on the roof is usually sufficient for a National with a well fitting flat roof. They are designed not to blow off. A hive with a gabled roof, such as a WBC, or a nucleus hive may need strapping or tethering with rope.

Plan to take BBKA assessments. For those who have not taken the BBKA Basic Assessment, please download the syllabus from the BBKA website and consider background reading with a view to taking the assessment next summer. The requirement is that you have kept bees for a minimum period of 1 year. LBKA will not pressurise anyone to take the assessment but does actively encourage and assist those wishing to do so. We will send electronic course notes to those LBKA members who wish to take the assessment next year. Reading about bees and beekeeping in the winter months is a useful way to spend our spare time and acts as a beekeeping bridge between the seasons. At the date of writing this article, the BBKA is intending to continue with its Basic assessments and Modular examinations in 2021. This is dependent upon the on-going Covid 19 situation of course.

Consider your approach to next season. Will you need an additional hive, nuc box or replacement frames? Most equipment suppliers have winter sales where they sell slight seconds. This is an excellent time to buy, especially if you search 2 or 3 websites for offers. If 2 or 3 people jointly purchase then you may even be able to save on the delivery charge.

Reflections on DEFRA's "Healthy Bees Plan 2030"

Simon's thoughts on DEFRA's "Healthy Bees Plan 2030". Please contact him if you have any perspectives or other comments.

Simon Saville
development@lbka.org.uk

On 3rd Nov, DEFRA launched the [Healthy Bees Plan 2030](#) "to help protect honey bee". There has so far been little media uptake, which is not surprising given that this is not "new news" and that the media has Covid and Trump to talk about. But it is likely to fuel the ill-informed debate about the "plight of honey bees".

This 10-year plan is an update to the plan published in 2009. It sets out four key outcomes to help protect honey bees:

- Effective biosecurity and good standards of husbandry, to minimise pest and disease risks and so improve the sustainability of honey bee populations Enhanced skills and production capability / capacity of beekeepers and bee farmers
- Sound science and evidence underpinning the actions taken to support bee health
- Increased opportunities for knowledge exchange and partnership working on honey bee health and wider pollinator needs
- It is supported by the Bee Health Advisory Forum, which comprises the British Beekeepers' Association (BBKA), the Bee Farmers' Association (BFA), the National Diploma in Beekeeping (NBD), the National Farmers' Union (NFU), the Veterinary Medicines Directorate (VMD) and the Welsh Beekeepers' Association (WBKA).

The plan says that "to deliver these outcomes an implementation plan will be developed with agreed actions. This will also set out when these actions will be taken and how progress will be monitored". So it is really a plan to develop a plan, rather than a set of actions. The implementation plan will "be refreshed every 3 years", to assess progress and determine whether any new actions need to be added.

The plan is to be welcomed, even though it doesn't yet address implementation. The references to biosecurity and good husbandry are important, as is the emphasis given to training and education. Pests and diseases are seen as significant issues to be managed - it mentions varroa, Asian Hornet and (in the future) the Small Hive Beetle as new threats for honey bees.

But its statements on biosecurity are particularly weak: “whilst all international movements of bees are required to be accompanied by a health certificate, providing health guarantees, there is inevitably a level of risk associated with moving honey bees from one area to another”.

The report makes no mention of EFB or AFB, which is alarming, given the very high levels of disease that have been recorded this year.

It's also good to see that all parties are advocating the benefits of being registered on BeeBase. The Report says that the number of registered beekeepers in 2010 was around 16,000 and that this had increased to over 42,000 by September 2020 (in England and Wales). It does not mention how much of the increase is due to a higher registration rate and how much is the result of beekeeping becoming more popular - though it does recognise that this is the case. Worryingly, it says that “as there are now more beekeepers per inspector, inspections need to be prioritised”. It's unrealistic to think that the same number of bee inspectors can adequately oversee two-and-a-half times the number of hives.

We will need to watch carefully to see how the action plan develops. I will be discussing this with the rest of the committee and will be recommending that LBKA write to BBKA to give its perspectives. **Do you have any comments or perspectives that you would like to tell us about?** Email me on development@lbka.org.uk.

Thermoregulation and insulation

This article taken from the writeup of a November Monthly meeting a couple of years ago, on the important and interesting issue of insulating beehives.

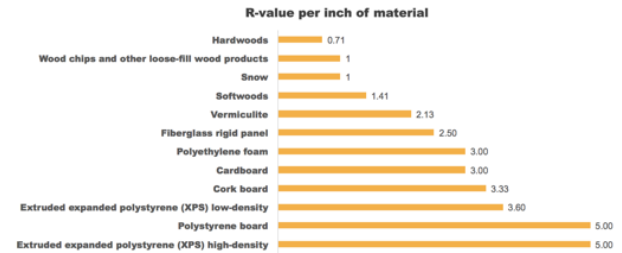
Aidan Slingsby
services@lbka.org.uk

This is a writeup of a November Monthly meeting a couple of years ago. Vlad Zamfir led the first half of the meeting, presenting the results of his reading on how bees regulate the temperature of their colony, how they do it in Winter and how insulation might help. Geoff Hood then explained how and why he has insulated his hives over the last few years.

Thermoregulation of the colony

Vlad explained how the colony thermoregulates itself during winter. Bees need to keep their thoracic tem-

SOME INSULTATING MATERIALS



Vlad's graph comparing the insulating qualities of different materials.

perature above 10°C, otherwise they cannot move and will die via a 'chill coma'. Also, certain metabolic processes only occur within a certain temperature range above 10°C.

If bees relied on their metabolic processes alone, they would be able to keep the temperature at around 10°C for a short time. Their furry bodies are good at keeping the heat in. However, they vibrate their flight muscles to generate heat, which can push their thoracic temperature to around 43°C. If they ingest anything cold (e.g. water) their body temperature will drop.

When temperatures drop below 18°C, they start to cluster. This enables them to keep the colony warm more efficiently as the ratio of number of bees to cluster surface area is high. Honey is the fuel for heating the cluster; besides energy, metabolising honey produces CO₂ and water. The cluster will move around the hive as a unit, towards honey stores (almost always upwards or slightly sideways, nearly never down). If cleansing flights need to take place, the cluster may temporarily extend towards the entrance. Empty combs conduct less heat than combs filled with honey, so the core of the cluster prefers to occupy empty cells while the edge of the cluster (top/sides) will be in contact with honey. The bees will determine how much heat (and water vapour) should be removed from the cluster. Consuming 1kg of honey will produce 0.68kg of water.

At below 14°C, the cluster forms a distinct structure, with the 'core' surrounded by the 'mantle'. The Mantle (outer shell) is the coldest layer, with an edge temperature of around 8°C. This rises to 13°C for the bees just inside the mantle. Here, the bees are tightly packed with their abdomens pointing outwards, heads inwards, and thorax hairs interlaced. This layer can contract or expand, regulating how much water & heat escape. At -10°C, the layer reaches its maximum contraction. The Core doesn't change in size, no matter the temperature outside. Its minimum temperature is around 20°C when there's no brood. Its maximum temperature is 35°C when there's brood. Bees circulate throughout the cluster on a 24 hour cycle, but not at night. The relative humidity in the core is 50-85%.

Propolis and water both play a role. Propolis repels water, is used to coat the interior surface of the cavity and is used to seal cracks, and reduce the entrance,



Geoff showing us how to insulate our hives.

for some subspecies of honey bees. Water is needed for climate control in the hive, hydration and diluting honey (honey bees can only metabolise 50% sugar solutions). Brood food can be 90%+ water.

If the hive is warm but the crown board is cold, condensation will form on the underside and cold water will rain onto the cluster. If it's frosty outside, this condensation may be very cold. If there is insulation on the crown board but not the side, the condensation will be on the vertical walls of the hive, so won't rain down on the colony.

If there is ventilation below the crown board, warm air will be lost and the resulting chimney effect may cool the hive and make honey consumption go up by about 12%.

How to insulate

Geoff Hood introduced the topic of insulation, its history and how he does it.

It turns out that before the Second World War, beekeepers routinely insulated their hives, by putting old blankets, sacking or straw under the roof of their hives. In addition, most hives were double-walled (like the WBC) with a single entrance at the bottom and no ventilation at the top. This mimics the natural location in a tree with a thick wall and roof with no top ventilation.

So why is the advice in most beekeeping books that one shouldn't insulate and should vent the top of the hive?

Geoff thinks that this can be traced back to rationing, where beekeepers had to preserve resources, particularly as beekeeping was widely promoted by the Government due to sugar shortages. Single-walled hives with no insulation saved resources. The problem wasn't the cold, but the condensation that results in cold water raining down on the bees in the colony due to condensation from poor insulation.

The Rothamsted Bee unit (predecessor of the NBU) was asked to find a way of keeping bees alive without using valuable wood, cloth or wool insulation. They found that colonies in uninsulated hives could survive with a small amount of top ventilation. The recom-

mendation was to crack the propolised crown board in early winter and to place pennies or matchsticks under the crownboard.

Since then, this beekeeping practice remains the orthodoxy.

Geoff explained that ventilation was only promoted as a way of increasing the chances of uninsulated hives surviving. Now we have the resources to insulate hives, he thinks we should be doing that.

He recommends:

- Placing insulation (e.g. Kingspan, polystyrene or wool) in the roof just above the crownboard.
- Ensuring there is no ventilation below the crown board as warm air will escape and will draw in cold air due to the chimney effect (the roof should be ventilated).
- Reducing the entrance block
- Using an open mesh floor, with varroa board out, and the back of floor sealed up
- In exposed places, an empty super can be placed under the floor to create still air

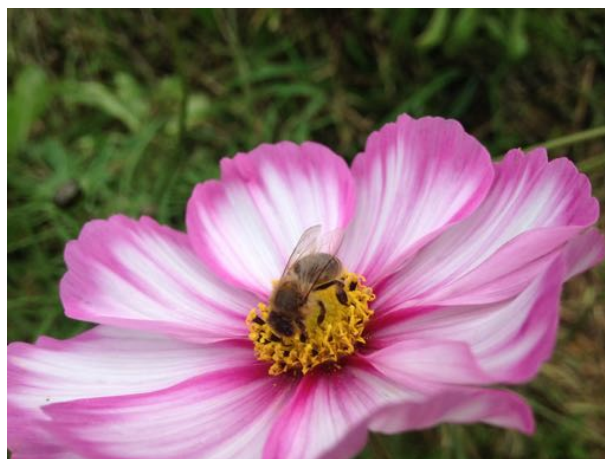
He then talked about the importance of not bending ones back. He suggested that everyone should have taller hive stands, so that when your arm is by your side, your knuckles are level with the top of the brood box. The empty super under the floor helps in this respect.

Many thanks to Vlad and Geoff for their preparation and insights. This meeting may lead to quite a few people rethinking their winter hive setup.

Banter (In)digest(ion)

Some of the highlights from LBKA's members' WhatsApp group, with an interesting and useful mixture of questions, answer, thoughts, experiences, good practice and articles.

We're looking for members to summarise the issues discussed in a digestible way. Please contact services@lbka.org.uk if you may be able to help in some months.



The ivy flow is now coming to an end with most of the blooms already fading and the signs of the first berries appearing. These will ripen in time for late winter and will provide a feast for over wintering thrushes and wood pigeons after the red berries of **hawthorn**, **cotoneaster** and **sorbus** have all been polished off.

I've been busy in the greenhouse this past week, cleaning the green house firstly to evict slugs and snails hiding in stacks of empty pots and cleaning algae and moss from the windows to ensure over wintering plants receive as much light as possible through the dimly lit winter. Having been cleaned I am now busy propagating cuttings from my favourite aromatic shrubs including **lavender**, **sage**, **rosemary** and cuttings from **flowering currant**, **Escalonia** and **Hebe**. I've also been cutting down fading stems from herbaceous plants and lifting and dividing them to propagate for next year. This week I've done this to **marjoram**, **mints**, **cat-mint** and next on my list are the **Heleniums**, **Asters** and **Kniphofia**.

My bulbs are now all in the ground including an additional 200 **Saffron Crocus**. The ones I planted last year are just beginning to flower offering pollen to the bees on warm days and soon **Saffron** for my kitchen!

Other tasks to be getting on with in the garden include collecting fallen leaves to make leaf mulch for the garden – this is great as a top dressing for suppressing weeds and feeding the plants.

Focus on Forage

Mark tells us what's in flower at this time of year. This article was originally written in 2015.

Mark Patterson
forage@lbka.org.uk

Only the most hardy of flowers are still in bloom in my garden as whilst the days have been mild, it is starting to become much colder at night. My **pumpkins**, **courgettes** and **nasturtiums** are already keeling over due to the cold nights, only my **cosmos** and **sunflowers** persist out of the garden annuals I have flowering. Quite a few of my herbaceous perennials are struggling on however with **Cat Mint**, **Helenium**, **Rudbeckia**, **Asters**, **Golden rod** and **Penstemon** still in bloom.

Away from my own garden I've spotted **Abelia**, **Choisya**, **Hebe (Autumn Joy)** and **Escalonia** pushing out a late flush of second blooms, though not in sufficient abundance to entice honey bees to visit.

Guest Blog: Flesh Eating Zom-Bees

A topical [blog post](#) from Mark Patterson. Not all bees are strict vegetarians. A few break the mould and favour rotting flesh. Read on to learn about the *Trigona* Vulture Bees of South and Central America.

Mark Patterson
forage@lbka.org.uk

Beware of spooky flesh eating zom-bees this Halloween.

It's well known that bees are vegetarian and get all their protein from plants in the form of pollen, right? Wrong! There's a little known group of more sinister-sounding bees that feed on decaying flesh and Halloween is the perfect time to learn about them.

Vulture Bees are a group of bees belonging to the *Trigona* genus found in Central and Southern America from Panama, The Amazon basin to Guiana. The *Trigona* genus comprises of about 80 species, all of which are social bees nesting in small colonies and producing modest stores of honey. They are often referred to as stingless bees along with *Meloponini* bees since they don't sting in defence of the colony like other bees do and instead they bite aggressors to defend their colony. They build neat little nests in tree hollows and hollow branches using wax and plant resins. Their nests are a series of disks with the hexagonal honey pots arranged on the upper side of the disk – sort of like a wasps nest but upside down.

Of the 80 or so *Trigona* bees, 3 of them are referred to as vulture bees because of their unusual habit of scavenging dead carcasses for protein. They are what entomologists refer to as obligate necrophages meaning they must feed on flesh for protein. These tiny bees lack a pollen carrying brush on their legs like other bees in their family and do not store pollen in their nests. Whilst they still visit flowers to collect nectar from which to make honey and in the process still pollinate plants, they do not collect pollen and instead feed on decaying flesh as their sole source of protein.

Until recently little was known about Vulture bees. One of the 3 species *Trigona* necrophaga was only discovered in 1982 and its only more recently that they have been properly studied to understand exactly how they live.

The bees home in on decaying carcasses with their keen sense of smell and are probably also able to detect the thermal signature of warm decaying bodies. When they find a suitable corpse to feed on they need to find a way into the flesh. They are small bees and not capable of chewing through thick animal skin to get to the flesh so



Frank's hive stands.

like flies they rely on entering the body through open wounds or natural openings like the nose, eyes sockets, ears and mouth.

They chew on the soft decaying flesh and store it in an adapted honey stomach until they return to the nest where they regurgitate the rotting flesh which is fed to the bees larva. These bees add enzymes to the flesh to prevent it decaying completely and will make a bee bread like substance from the flesh for longer storage.

Unlike the Honey Bee which performs a complex waggle dance to communicate to their nest mates where they have found good sources of food the Vulture bees are thought to communicate using pheromone trails and trails of saliva - so don't expect to see these bees dancing to Michael Jackson's Thriller any time soon - though if they did, it would look pretty cool.

So who's dressing up as a Vulture bee this Halloween?

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.

Frank Ryan: I make beehive stands from strong premium-grade materials, painted an attractive holly colour using bee-friendly paint. Each stand is made to measure a for comfortable working height and has the option to expand from a single stand to a double. The dimensions allow for ratchet-strapping. Contact Frank on 07877388933 or frankryan60@hotmail.com.

Frank Ryan: I have Langstrough equipment for sale as I now use national hives. Brood boxes, supers and one solid floor and queen excluders. Contact Frank on 07877388933 or frankryan60@hotmail.com.

Upcoming events

Sunday 8th November: Monthly Meeting: Hygiene Matters: the end of season cleanup

11:00-13:00 at Via Zoom.

Richard will be giving important advice on cleaning your equipment in preparation for the next year's beekeeping.

Wednesday 11th November: Annual General Meeting

18:30 at via Zoom.

As well as the formal business of electing a new committee, the AGM is a chance to review what LBKA has been doing and to have a say in what it should be doing in the coming year. All members are welcome (please note that you must be a 2020 member though - so don't forget to renew!). Please consider standing for the committee - speak to a committee member for more information.

Wednesday 18th November: Pollinators and Pollination: Nature and Society

18:30 at Via Zoom.

Professor Jeff Ollerton, Professor of Biodiversity at the University of Northampton will talk to us on the subject of Pollinators and Pollination: Nature and Society.

Tuesday, 24th November: Pub Social

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

Our ONLINE pub social in the historical surroundings of your own home. Bring your own beer. Using the usual ZOOM link in the Members' Area and sent to your email.

Sunday 13th December: Monthly meeting: Christmas quiz and social

11:00-13:00 at Fairley House Junior School, 218 Lambeth Rd, Lambeth, London, SE1 7JY

Annual Christmas quiz, followed by social. Meetings are for members only, but you're welcome to come as a guest to find out more about our association.

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:** Natalie Cotton, admin@lbka.org.uk
- **Education:** Howard Nichols education@lbka.org.uk
- **Membership:** Aidan Slingsby, services@lbka.org.uk
- **Apiaries:** Tristram Sutton, apiaries@lbka.org.uk
- **Development:** Simon Saville, development@lbka.org.uk
- **Mentoring:** Elliot Hodges, mentor@lbka.org.uk
- **Events:** Martin Hudson, events@lbka.org.uk
- **Resources:** Will Fry, resources@lbka.org.uk

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

