



The London Beekeepers' Association

LBKA News

January, 2016

Happy New Year! Although it doesn't seem like long since the last issue of LBKA News, LBKA members have once again come up with excellent content for this first newsletter of 2016. **Ted** writes his first full piece on page 9. We have three first-time contributors (hopefully, the first of many): **Anya** (who writes about last month's meeting on page 5), **Sue** (who's "waxing scientific" on page 10), **Geoff** (who writes about his experiences with polystyrene hives on page 10) and **Tseiske** (who provides a roundup of what's been going on on Facebook on pages 14 and 14). In addition, regular contributors **Howard** and **Mark** give the usual invaluable seasonal advice. **Richard** tells us about the state of our teaching apiaries. And **Emily's** been speculating as to why some visitors to her blog end up there.

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A big thank you to all this month's contributors: **Tsieske van den Broek**, **Richard Glassborow**, **Geoff Hood**, **Anya Ignatieva**, **Sue Lee**, **Howard Nichols**, **Ted Parkes**, **Mark Patterson** and **Emily Scott**. We're always looking for new and interesting contributions – please contact me if you're interested.

Aidan Slingsby
Editor
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From our Chair

Richard Glassborow
chair@lbka.org.uk

I would like to start by wishing all our members a very Happy New Year. I am sure we are all looking forward to a good 2016 season with plenty of warm days, not too wet or too dry, plenty of nectar and lots of honey at harvest time. One can always wish!

As I said in the last newsletter, this is the time of year when the committee are filling in the diary for the year. As part of this process we have been referring to the feedback so many of you kindly supplied when you renewed your membership to see how we might better align activities and services with members wishes.

First, I am glad to report that almost all the feedback was positive and a significant majority of that concerned this newsletter. I would like to thank the many contrib-



Winter acconite – one of the few flowers that is flowering at the correct time of year! Photo: Mark Patterson

utors, regular and occasional, who help create a magazine that reflects the healthy and vibrant beekeeping association that is the LBKA. But most especially I thank our editor, Aidan Slingsby. He really is unequivocally the person who makes this journal what it is. Many members also contributed good ideas and – while we may not always be able to incorporate them in the format suggested – we will try our best to see that they have an influence on our activities and services.

There were several suggestions concerning the monthly meetings, content, format and location, and I would like to dwell on these here as we are trying to incorporate them in this year's programme. The location issue is always tricky as London is a large city and we have members far and wide. Whilst continuity has distinct advantages in building up regular attendance it is clearly a disadvantage if the regular venue is difficult to reach for some members. Though progress has been disappointingly slow so far, we still have hopes that we will be able to hold some meetings at Holland Park later this year. It is a lovely venue and reasonably well served by public transport. Parking is however an issue as the carpark is commercially run and charging is 24/7. As soon as we can we propose a trial meeting there to see how members respond. There may be other venues to look into: we have had some suggestions, more are welcome. Please contact me at chair@lbka.org.uk.

We have been aware for some time that some members would like more variation in the monthly meeting content. But we have a bit of a dilemma. As has been pointed out, the honeybee annual cycle does not vary much from year to year. We know the topics synchronised to the beekeeping season are much appreciated by new and less experienced beekeepers but that intermediates and experienced beekeepers find this becomes repetitive and their attendance falls off. Last year we did start to attempt to advance the level at which topics are covered. The balance we think we are seeking is more advanced coverage for the more experienced keepers without overwhelming new and less experienced keepers. Into this mix we have thrown a couple of ideas of our own: bring forward the topicality slightly so that meetings cover subjects just before they need to be carried out rather than at the same time. The theory is to give members time to prepare with the benefit of the monthly meeting. The theory is not so easy to timetable because obviously many subjects and procedures are concentrated into a small part of the year. But we are working on this.

The second change we are considering concerns the format. Some members have suggested longer meetings to make better provision for questions, chat and general socialising and networking. To this we have added the need to cover some topics more fully. Two obviously important examples are bee disease and swarm control and prevention. The importance of bee health speaks for itself and even the most experienced beekeepers are usually keen to take advantage of any opportunity to learn about disease, especially ones they hope never to

see but might. The second example, swarm control and prevention, is, frankly, becoming a problem in London and we all need to raise our game in preventing our bees from swarming, not just because swarmed colonies rarely produce much honey but because there is a danger of swarms becoming considered a public nuisance and of feral colonies comprising an uncontrollable reservoir of disease. This is an especially urban beekeeping emphasis. There is certainly room for debate but also an inescapable need for knowledge and skill.

What we are considering is to make most monthly meetings slightly longer to better facilitate Q&A sessions, more socialising, debate and chat time and to allow seasonal topics to go into a little more depth if required. There is a cost implication to this of course (Venue hire). Swarm prevention and disease control we propose making significant (half day?) meetings so we can better do justice to their importance and complexity.

Whilst these may seem like modest modifications they do require considerable and careful thought (and some cost as mentioned above) It would be really useful to get some feedback on these proposals – supportive and or critical.

Ideally, all levels of ability and experience will find these changes to format of interest and, if attendance is widened and increased there should be a snowball effect to their value.

Announcements

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

Next Monthly Meeting

Our next meeting will be on **Sunday** (10th January) at **11:00** at **Fairley House Junior School (220 Lambeth Rd, SE1 7JY)**, on the subject of **wax moth**. You might be surprised how much there is to the wax moth



The venue for January's monthly meeting – the white door on the left.

and its life-cycle! There'll also be an opportunity to discuss other topics, followed by the usual tea/coffee and chat.

February's monthly meeting will be on **14th February** on the subject of **spring management and shook swarms**. More details will follow.

Apiary thefts

There have been a **series of thefts of equipment and bees** from one of our members' apiary in South London. Equipment was taken in June of 2014 and frames of bees were stolen on four occasions, from two apiaries, between February and April of last year (2015).

In response, the apiarists involved took measures to tighten security of their hives and apiaries. These included the fitting of security cameras and images were obtained of someone carrying a polyhive on two occasions late at night in April – probably by someone who knows what they are doing. The police have been informed and the case is being investigated. They are proposing to post photographs of the thefts in the vicinity of the apiaries to alert locals.

Such thefts so 'close to home' are a reminder that it's worth reviewing our apiary security every now and again. Precautions may include marking your equipment and locking sheds...depending on the position and setup of your apiary. Making equipment more traceable, difficult to access, and difficult to carry away are sensible (and perhaps important) precautions.

Mead-making tour

Emma Nye has organised a visit for LBKA members to see how Gosnell's Mead is made at their site in Peckham (Ann Eatwell also organised a trip to the same place last year, which was excellent). This members' only event only has space for 25 people, so pre-booking is essential. **Please email admin@lbka.org.uk to reserve your place.**

This event will act as one of our two winter lectures – details of the other (more focussed on scientific research) will follow once we've confirmed the details.



Gosnell's London Mead.

New members' area on the website

We now have a new secure "members' only" section of the website and each member has their own login details. Just follow the "members' area" link (http://lbka.org.uk/members_area.html), 'reset' your password, wait for a password will be emailed to you, and then you're in! You can then reset your password to something more memorable.

Currently, you can:

- Check your details (including your BBKA membership number)
- See details about other opted-in members (see below)
- Read minutes of committee meetings
- Download details of our proposed application to become a charity
- See declarations from committee members

When you joined LBKA, you had the option to **opt-in to share your details with other opted-in members**. About 50 members of you chose to do this. If you opted in, you will see details about all other opted-in members, where they live, their experience and what kinds of beekeeping help they are looking for and/or offered. We hope to have distance-based sorting soon!

Along with the members-only Facebook page, we hope this will help members form local support networks with each other. For example, if you're a swarm collector, you might check to see if any members near you are interested in seeing a swarm being collected. Or you might want to see whether anyone nearby is happy to show their hives to members.

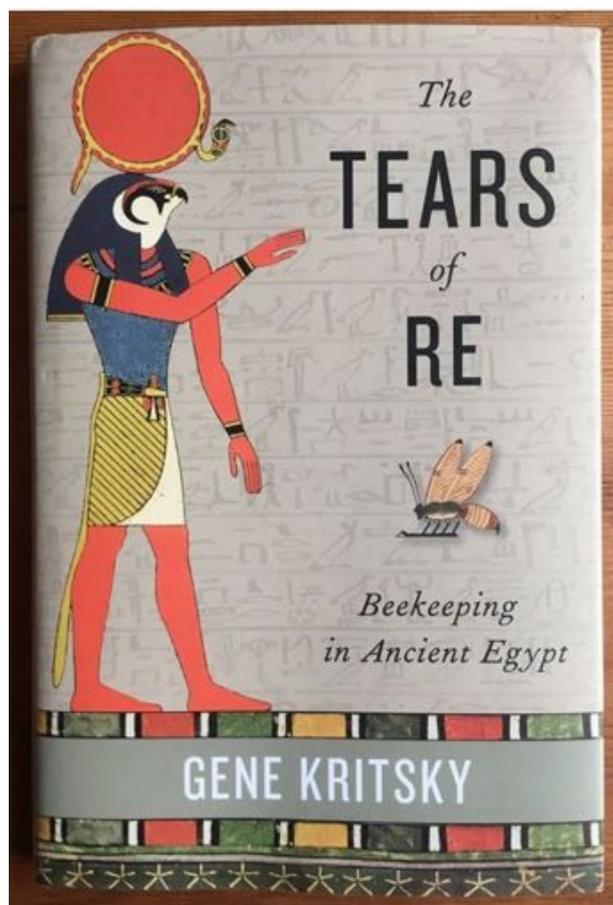
We will add the means to update your sharing details – for now, email services@lbka.org.uk if you need to make any changes.

Do let us know what you think and how we might be able to make this more useful.

Job opportunity: beekeeper and course delivery

Walworth Garden's (Braganza St, SE17 3BN) apiary manager is leaving and they are looking for a **replacement beekeeper** and an **experienced & knowledgeable tutor** to deliver ten hour adult learning classes on the lifecycle of bees and the role of pollinating insects in gardens. These two roles can be carried out by the **same person or two different people**. They would pay an hourly/session rate for specified contracted services. The beekeeper is needed from February onwards and the tutor is needed from April onwards. The apiary currently has 4 hives.

Anyone interested in either or both these opportunities can contact Richard at chair@lbka.org.uk.



Lecture and book-signing: *Tears of Re: Beekeeping in Ancient Egypt*

Talk about Beekeeping in Ancient Egypt

This lecture and book signing by Gene Kritsky will be on **22nd January at 18:30** at **Lecture Theatre G6, Institute of Archaeology, 31-34 Gordon Square, WC1H 0PY**.

The following is a quote from the author:

“According to Egyptian mythology, when the ancient Egyptian sun god Re cried, his tears turned into honey bees upon touching the ground. For this reason, the honey bee was sacrosanct in ancient Egyptian culture. From the art depicting bees on temple walls to the usage of beeswax as a healing ointment, the honey bee was a pervasive cultural motif in ancient Egypt because of its connection to the sun god Re. Gene Kritsky delivers a concise introduction of the relationship between the honey bee and ancient Egyptian culture, through the lenses of linguistics, archeology, religion, health, and economics. Kritsky delves into ancient Egypt’s multifaceted society, and traces the importance of the honey bee in everything from death rituals to trade. In doing so, Kritsky brings new evidence to light of how advanced and fascinating the ancient Egyptians were.

This richly illustrated work appeals to a broad range

of interests. For archeology lovers, Kritsky delves into the archeological evidence of Egyptian beekeeping and discusses newly discovered tombs, as well as evidence of manmade hives. Linguists will be fascinated by Kritsky’s discussion of the first documented written evidence of the honeybee hieroglyph. And anyone interested in ancient Egypt or ancient cultures in general will be intrigued by Kritsky’s treatment of the first documented beekeepers. This book provides a unique social commentary of a community so far removed from modern humans chronologically speaking, and yet so fascinating because of the stunning advances their society made. Beekeeping is the latest evidence of how ahead of their times the Egyptians were, and the ensuing narrative is as captivating as every other aspect of ancient Egyptian culture.”

Forage ideas?

We’re planning more forage-planting events this year. **Do you have ideas for where would be good places to plant forage?** If so, please tell Mark at forage@lbka.org.uk.

Beekeeping courses in April and May

We’re running two types of beekeeping course this Spring. The weekend course for those interested in bees include a book, LBKA membership and – crucially – a season’s mentoring. The “taster” course is for those who just want to know a bit more about bees.

Full details of the courses and how to book are at <http://www.lbka.org.uk/courses.html>. Remember that our full beekeeping courses include a season’s mentoring, the best way to equip participants with the knowledge and skills to keep their own bees! So do spread the word!

Old announcements from December

Check previous newsletters at <http://lbka.org.uk/newsletters.html> or contact services@lbka.org.uk for more details.

Your feedback: Thanks for the feedback you provided when you most recently joined. The committee are using these to help improve our offerings to members. Your feedback (to any committee member) is welcome throughout the season.

Tesco grant: We’ve applied for a grant of £12,000 to improve forage for bees of all kinds at Mudchute City Farm.

General Husbandry Course: See p5 of last month’s newsletter for details of the Surrey Beekeeping Association’s General Husbandry Course (**13th February; £35; rickwoods@lbka.org.uk**).

Talks at Kew: The Kew Mutual Improvement Society Lecture series includes "The Effect of Pesticides on Bees" (8th February). See <http://www.kew.org/sites/default/files/kmis-2015-16.pdf> for more details of the lecture series.

The "Worker Bee" newsletter is available at <http://tinyurl.com/jb7rqsf>

LBKA membership ended last September. For help or clarification about your membership, email services@lbka.org.uk.

Old announcements from November

BBKA Basic: If you've kept bees for at least a year, we'd encourage you to do your Bee Basic exam. Howard offers coaching to prepare members to take this – email Howard on education@lbka.org.uk for more details.

"Preparing Honey and Wax" talks is organised by Surrey Beekeepers Association - a day of talks about preparing honey and wax on Saturday, 23rd January. Email rickwoodsaka@gmail.com

Potential NW3 apiary: Nikki lives next to Hampstead Heath (NW3) and would like to offer it as a site for one of our members to keep bees. If you'd like to know more, please contact services@lbka.org.uk for more details.

Do you have any announcements?

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

December's monthly meeting: Christmas Quiz

What happened at last month's meeting. Many thanks to Jon for running the quiz.

Anya Ignatieva
LBKA member

Twenty people, new and old, attended Decembers monthly meeting in a warm school hall in Lambeth. It involved tea, biscuits, honey beer and a fun Christmas quiz.

After tea and catch-ups, we sat down and the chairman answered any questions and thoughts people had.

We were then split into 3 groups of 6 based on where we were sat and told to put our thinking caps on. The questions were great and ranged from the knowable to the impossible, but some still knew the answers!

All in all it was a great learning opportunity for many and an encouragement to all those who new their stuff. Afterwards, while some had to rush off others waited the rain out and relaxed over a cup of tea.

Below are the answers to quiz questions:

1. Spell "proboscis"
2. It takes a larvae 21 days to become an adult worker
3. Maximum percentage of water allowed in honey by FSA is 20%
4. Latin for "bee" is Apis
5. The earliest depiction of a bee was 15-20 thousand years ago
6. There are 20,000 species of bee in the UK
7. The first jobs of a worker bee are to clean and to help with incubation through wing vibration
8. The country that produces the most honey is China
9. BBKA headquarters are in Warwickshire county
10. The BBKA has about 24,000 members
11. The potential efficacy of Apiguard – according to them – is 95%
12. The active ingredient in Apistan is Tauflualinate
13. The E-number that represents bees wax is 901
14. The melting point of wax is 62-64 degrees
15. The flashpoint of wax is 204°C
16. Bees see the colour red as black
17. According to British folklore, the bees favourite colour is purple
18. The fastest a bee can fly is 15-20mph
19. Honey is more likely to crystalize if it has a higher level of fructose than glucose
20. Royal jelly doesn't contain fat soluble vitamins
21. The compound in royal jelly that creates a Queen is called Royalactin
22. Beetles were the insect we first thought pollinated plants
23. Barbitty Bumble was the bee cartoon character in The Tails of Mrs Tittlemouse
24. A health certificate is needed for the importation of Queen bees
25. NBU is to be informed of any imports
26. Staffordshire had the highest levels of AFB in 2015
27. A wax moth larvae takes 6-7 weeks to develop
28. A bee stinger is 3mm long
29. Bee venom is called 'apitoxin'
30. Bee blood is yellow

January in the Apiary

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

Howard Nichols
education@lbka.org.uk

January is a quiet time for beekeepers but an eye must still be kept on the apiary. Make sure that the roof has not been blown off by winds or that woodpeckers have not taken an interest in the hive.

The queen should now have started to lay again, albeit in a small way. Despite the unusually warm weather some colonies have stopped laying. Others have not.

Varroa strategy

Treatment in autumn with Apiguard may not have been enough to deal with the mite. Treatment with oxalic acid in late December or early January is a standard treatment for Varroa. Oxalic acid is still cheap to buy and the time taken to open the hive and administer is all done in less than 1 minute if bees are not flying. As always, it is essential to wear a veil when opening the colony to treat. Do not take chances.

Food stores

If the colony went into the winter with 35lb of stores then feeding will not be necessary, even in this exceptionally mild winter with the bees flying. If stores were light a couple of months ago then it may be an entirely different matter. We have had an exceptionally mild autumn and winter so far with December being scheduled as the warmest for 70 years. If feeding is necessary then only candy or fondant should be used at this time of year. Sugar syrup should be avoided as it will excite the bees and so disturb the cluster. The bees are also unable to process syrup in winter and it is then liable to fermentation.

New equipment

Those who have purchased equipment during the winter sales can assemble frames, etc. It is surprising how quickly events can move when the bees get going in spring and ready assembled equipment keeps the beekeeper ahead of any eventuality. Some suppliers do have a post Christmas sale so it is still worth checking out the websites.

Cleaning old equipment

Best time to do this is immediately after it is taken out of use in autumn. If not done then winter is preferable to cleaning in the spring immediately before re use. Attention to general cleanliness and maintenance of old equipment is part of apiary hygiene strategy. Please do check for evidence of wax moth and place frames in a cold place wherever possible.

Candles and honey recipes

For those who process beeswax then winter is the usual time of year for this activity. Honey foodstuffs can, of course, be prepared and eaten at any time of year.

LBKA events

Keep in touch with others through the monthly meetings and winter lectures.

Education

Education and practical experience are the 2 routes through which beekeepers develop their skills. Education may arise from a variety of routes but Beecraft is a substantial resource. If you do not currently subscribe to Beecraft then January is a good month take out an annual subscription (directly through them).

Registration with Beebase

Please register your hives with Beebase. This is important in cases where a notifiable disease or pest is found in your location. It is only a matter of time before the Small Hive Beetle arrives in the UK and London is regarded as a likely arrival point. The Bee Inspectors are on full alert and have plans in operation but such contingencies are dependent upon them knowing the location of all hives and apiaries. Please do ensure you are registered.

January's Focus on Forage

Mark's regular (renamed) update on what is in flower that bees like.

Mark Patterson
forage@lbka.org.uk

January is usually a cold month of the year when very little flowers. This winter so far has been the warmest



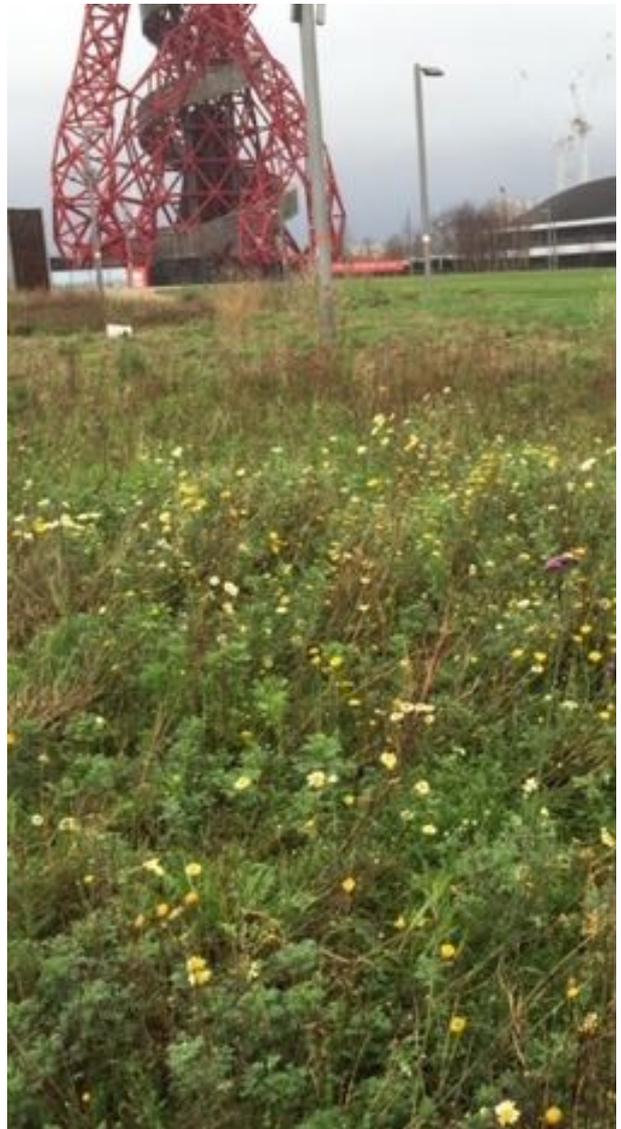
Honey bee in mahonia: a plant that flowers November to March... but this year is going over already with many bushes already sporting semi ripe fruits.



Fox and Cubs: summer flowering plant... currently flowering in January!



Red clover: a plant crucial to emerging bumble bee queens emerging April and May... currently flowering in January!



Cornfield annuals in bloom at the Olympic park on 2nd January – imagine keeping your bees near here!



Daffodils in bloom at Christmas.

for over 80 years. December was very mild indeed with day time temperatures regularly hitting the high teens. This has led to many spring flowers emerging 2-3 months earlier than they should and many late season flowers – rather than dying back – have continued to flower, pushing out a steady stream of blooms all winter. Because it has been exceptionally mild, our bees have also been very active with no real sign of proper clustering. My bees have been flying on many fine days throughout December and have been bringing back an abundance of pollen, mostly shades of yellow and creamy white in colour.

Last year was also an exceptionally mild winter. Each January the Botanical society of Britain and Ireland hold a new year's plant hunt. Botanists across the nation go searching for flowering plants in bloom between the 1st and 5th of January and send in their finds. In most years fewer than 50 species are found in Britain and Ireland but in January 2015 over 250 were found in bloom. This year I took part in their new years plant hunt and discovered 74 species of plant in bloom in Tower Hamlets. About a dozen of those I found were exotic escapes, the rest were native and my count came very close to beating the society's record for the most plants seen in bloom by a single person on a single walk in January! If you have been on a walk yourself in the first 5 days of the year and photographed or made notes of flowers you've seen, you can submit your records to http://www.bsbi.org.uk/new_year_plant_hunt.html.

Other studies have shown that the time of flowering in

many native plants is advancing by about a week per decade over the past 100 years so plants normally flowering in March are now regularly being seen in bloom in January. Bumblebee experts are warning that many bumblebee queens are now emerging earlier and earlier than usual, but are still out of sync with their preferred flowers giving concerns that some queen bumble bees may starve when they emerge from hibernation in spring.

What this spring will hold for our honey bees remains to be seen, we still have February to get through and February is traditionally the coldest month of the year with Valentine's day time supposedly the coldest day of the year on average, according to the MET office.

The mild winter may wreak havoc with fruit trees this spring. Many orchard fruit trees require or at least flower best following a harsh winter. A prolonged cold spell followed by a gradual increase in temperatures activates hormones within the plants stimulating the development of flower buds. As a result many fruit trees flower and set fruit better following a cold winter. Pears and older apple varieties, in particular, are at risk from increasingly mild winters. As a result fruit breeders are constantly cross breeding in an attempt to breed varieties that can better cope with a milder climate and still produce a good set of flowers and high yield of fruit. Some of the varieties which can be expected to perform better in mild winters include the apples "Anna" and "Dorset Golden" and pear "Conference". Varieties like apple "Breaburn" and "Comice" pears will likely perform less well this season due to our mild winter. This is something to think about if you're planning to plant a new fruit tree in time for spring. The other risk with a mild winter is that the blossom may emerge earlier and then be hit by a late April frost wiping out the blooms, and resulting in no food for pollinators and no fruit for us.

Many plant seeds also require a cold period of dormancy before they will germinate and grow. A good example of this is Yellow Rattle, which requires prolonged cold to germinate successfully. I often place these seeds in the fridge for a month before sowing to ensure a good germination rate. Hopefully the mild winter won't effect our wild flowers the bees rely on too much.

Right now crocus are already in bloom, meaning our poor bees will likely miss out on their early source of pollen. Bulbs only flower once in a season, so if they flower early and our bees miss out, that's it for the year. At least herbaceous and annual plants produce successions of blooms so bees will hopefully still be able to find enough to forage on come spring.

If the weather stays mild it may be worth starting off half hardy annuals and perennial seeds early to take advantage of the early growing season. The risk with this is that if the weather then turns cold and true spring comes late your green house or window sill be be clogged up with plants for many months before its safe

to plant them out. Hardy perennials like Echinacea, Rudbeckia, Helianthus, Everlasting Pea can be sown now onwards.

LBKA Apiaries

News from LBKA's teaching apiaries.

Richard Glassborow
chair@lbka.org.uk

This is traditionally the quietest time of year for apiaries. The bees are usually clustered in the hive. However, as we know, these are not normal times. I know from the two hives in sight of my kitchen window there has barely been a day when they have not been flying in quite significant numbers.

In such circumstances there are two common concerns for most beekeepers: will they be broodless with the weather being so warm? Will all this flying cause them to run out of their stores?

So, with this in mind, I thought I would share what I found out when I went to the Eden apiary on December 19th. I had gone to administer oxalic acid but I was curious to know if my concerns were well founded and as the temperature was 17°C I thought why not do a full inspection and find out.

To be honest, I think I was expecting to find brood and, though the colonies were still pretty heavy, depletion of supplies. What I actually found was no brood in any of the four colonies inspected and more supplies than when I had previously looked more than a month earlier, much of it apparently fresh nectar!

So in these colonies at least, I suspect that day length is more influential on lay than temperature. And in this part of London at least, forage is plentiful even at this time of year if the temperature allows. Just don't rely on this!

Here & there

Ted kicks off his new column in LBKA News, in which will compare beekeeping in this country with that of his native Canada.

Ted Parkes
 LBKA member

Well here we are a new year and the January issue.

Preparations for new beekeeping season just around the corner. For anyone that may have missed the previous issue I will explore and discuss some of the differences I find between here in London and back in Ontario. I hope that part of this process will involve getting my hands dirty in an apiary in the new year. So in keeping with so many other publications on the planet I am going to use my contribution this month to look over a few Here and There honey stats from 2015. There are many statistics collected but for the sake of this discussion I will focus on honey production. There are lots of reasons to keep Bees but honey production is important and perhaps the most rewarding.

The 2015 average UK honey production was 21lb (21 pounds; about 21kg) per hive. London was above the National average at 27lb per hive. Yields ranged from 16lb to 27.3lb per hive. The Canadian average is 132lb per hive with Alberta taking top spot with yields between 125lb and 145lb per hive. Ontario average was 84.3lb per hive. The difference is staggering.

These numbers didn't come as a total surprise knowing the past yields in Canada. At a recent LBKA meeting talking with a few fellow beekeeper the topic of yield came up. They talked about yields of 20lb give or take and in one case a little less. I wasn't sure what to say or what to think given the yields I am use to as a beekeeper in Ontario. It started me thinking about why such disparity. London enjoys a longer season than Ontario and its green all year round. Although Ontario summers are warmer and sunnier there are at least 4 months of serious winter. My next thought was colony size. I am not familiar with the National Hive which I understand is the most common hive and widely used here. In Ontario its rare to find anyone using something other than a Langstroth hive. With a little search of the internet I discovered there are two National Hives. A regular National hive and the Deep National Hive. When comparing the two they are similar in size and the actual total brood area of the frames are similar with the Langstroth in between the two sizes of National Hives.

Type	No. brood cells	Area (inch ²)
Langstroth	6,140	272
National Hive	5,000	199
(Deep) National Hive	7,000	292

So even with the slight difference in hives the colony size would not represent that kind of difference in honey production. Even if you factor in single vs double brood colonies. Weather is a big variable and changing all the time but could it represent a 300% difference? Another contributing factor that can't be overlooked – and a topic that is just now making inroads in Ontario – is forage. This access to nectar producing forage for the bees has to be a major factor. I hadn't actually given that a lot of thought until attending meetings here. It makes sense, particularly for urban Beekeepers but London enjoys some of the higher average honey production. You would think the rural areas would enjoy the higher yields. Consider the fact you can fit

the area Great Britain into Canada 43 times with just a little over half the population would support that. So you wouldn't think forage would be an issue but it is becoming an issue everywhere, with urban sprawl and genetically modified crops. Now pollinator friendly planting is in the discussion mix. The forage issue is big and its complicated and I may circle back on the topic in more depth in another issue.

In the meantime we enjoy the sweet harvest and look to prepare for a new season.

Waxing scientific

Sue (@beesupontheroof) kicks off her new column where she'll be reporting on recent bee-related science and research developments. Do contact her if you have any requests.

Sue Lee
LBKA member

Hi everyone, I'm Sue Lee and I've just started my beekeeping career, after taking the LBKA course last year and a season of mentoring with Roger at Charlton House. I'm going to be searching out the latest science and research news from around the world each month for the newsletter looking for items which you might not otherwise have seen, whilst conducting my own experiments up on the roof of a Grade 1 listed Jacobean mansion in London.

I'm a microbiologist by trade and professionally I've been working on clinical trial logistics for the last 25 years, but I've now moved sideways and spend my time writing about emerging markets and new technologies, and particularly addressing how they might be applied to improve patients' experiences.

I have (my first) two nucs of bees on order for the spring, and I'm going to be trying out different hives and methods, and attempting to apply some science to my beekeeping. We're already working on designing a monitoring system to give temperature and humidity data from inside the hive, using Wi-Fi to send the numbers straight to my laptop. Let's hope we can get it working for the spring! I decided to check out a Flow Hive™ for myself, having read lots of pros and cons, and I'll be comparing it to a regular hive with them positioned side by side up on the roof. I shall report back on what I find during the year.

Right at the end of the year reports came in from the USA to say that wild bee numbers have declined 23% over the five years 2008-2013, and the amount of land being converted to biofuel use is a significant contributing factor. US law requires that gasoline must contain at least 10% ethanol, which is mostly made from corn.

Now the decline in bees is not necessarily because of the monoculture that results, or because of the extensive use of herbicides and pesticides, or because corn is wind pollinated (so the crops do not present a food supply for bees) though each of these is likely to be a factor but may be more so with the huge fields that are created, to allow for easier farming and the use of huge machinery. This results in hedgerows and the strips of land at the edges of fields being sewn over and taking out all the local habitats for wild bees. Other crops which rely on wild bees for pollination are being affected which is likely to put a greater pressure on the commercial bee farmers (many of whom have already experienced colony collapse disorder). Plants like squashes and watermelons, but also fruit crops are likely to be seriously affected unless something changes. Set aside land is going to be become increasingly important as pollinator habitat. This is unlikely to affect London bees, due to the wide variety of forage on offer, but we'll be watching out for more news.

Polystyrene hives: a good alternative?

Geoff reflects on his experiences of using polyhives in the colder Northern reaches of London.

Geoff Hood
LBKA member (London, N11)

Most hives used in London are wooden. Apart from top bar hives, they differ only in minor detail from the wooden hives of the Rev. Langstroth's 1851 design. Yes – we have better frames, flat pack assembly and wire wax, but they are basically wooden boxes whose design dates back to the 1880s.

But I have recently been experimenting with polystyrene hives.

London is known for its heat sink effect and it is perhaps always a few degrees warmer than the surrounding



Mill Hill East. Source: Transport for London.



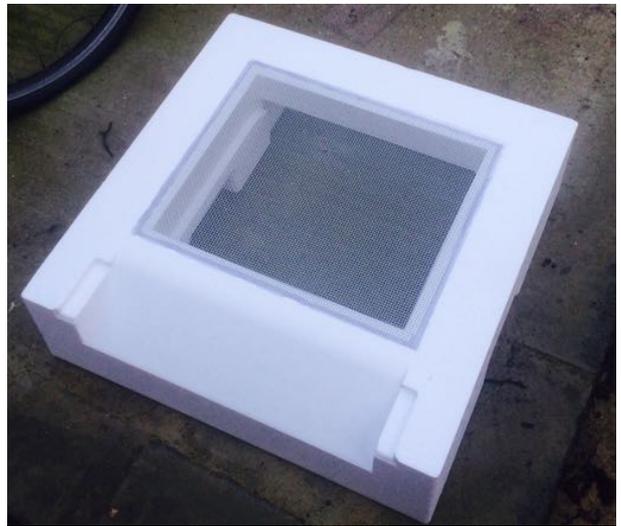
British National polyhive, straight out of the box!



A gabled roof that doesn't wobble when upside-down with supers on and strong enough to stand on!



How the polyhive fits fits together.



All-in-one (open mesh) floor.

Home counties. My hives are in North London, but they might as well be as in the Far North, as there few LBKA members in the area. If you look at the Northern Line tube map, my hives are half a mile north of that little stub that sticks out to the left of the Northern Line that ends at Mill Hill East. It is colder than Central London, as it is open countryside, despite being less than 6 miles from Charing Cross. The reason is that the area to the north of Mill Hill East was never developed because in 1948, they cancelled the tube extension northwards to new Northern line stations at Brockley , Elsteed South and Bushey Heath. These stations would have become as well known as Morden, Edgware and High Barnet had the line been completed. It therefore has excellent forage. It was the slightly colder temperature I experienced at Mill Hill compared to my garden

in Muswell Hill that that steered me towards trying a few polystyrene hives.



Finished hive, painted with Sandtex paint (a £2 tester pot does one hive).



Special UHU glue.

I had seen polyhives all colourfully painted in Germany and Czech Republic, but these were all Langstroths and I did not want to change my frame size from 14×12. However a friend of mine discovered that Beehive Supplies had started making 14×12 polystyrene Hives, He took the plunge and purchased a few polyhives for a training apiary. I helped him manage the site and then eventually took over the hives at the apiary in High Barnet.

I will therefore try to describe the differences I have found working polyhives. There are two basic types of polyhive. The first of these has the same external dimensions of a national 18.25"×18.25", but a smaller interior of 10 frame, due to the thicker walls of polyhives. The second of these has the same internal measurements of 14"×17" (11 frames) but with an external size of 19.5"×19.5". The Bee Hive Supplies' 14×12 are of the latter style and I prefer them as the insulation is very thick.

Polyhives come in flat pack and consist of a pre-formed varroa floor, pre-formed roof and four broodbox/super sides. The broodbox just glues together with polyceiling

tile cement – let the cement dry over night , stick in the runners and it's done.

The first thing you do is, of course, compare it to a wooden cedar hive. My first impression is that it looks like a overfed national 14×12. I thought it would be lighter than a cedar hive but it is not noticeably lighter because the polystyrene is very dense and completely different from polystyrene packing which bees can chew up easily. You now need to paint it with non gloss paint, as polyhives can degrade in UV light. I use a Sandtex external wall paint that is used to paint pebble-dash.

Then you notice other differences. There are no ventilation slots in the roof; and none roof void either – it is a solid roof that is flat underneath. The crown boards are also different as they are flat Perspex without any ventilation or feed holes. Both the crown boards and queen excluders have no bee space. Polyhive don't need to be ventilated because their high insulation makes the temperature inside the hive always above dew-point (i.e. high humidity does necessarily result in high condensation). Any condensation that occurs is at the air exchange points of the open-mesh floor and the entrance, both of which are below the bee cluster.

I'll quickly take you through my beekeeping year, so that I can tell you how this affects the bees and their management. I take off my honey supers from 15th July, as I have little or no flow after that date. By 1st August, all my hives are 14×12 plus a super above queen excluder (for space), in the following two weeks I force the bees down into their 14×12 brood box. I then start Apiguard before 15th August on the two tub cycle (three tubs if I have a high varroa load on a 14×12), Apiguard causes polyhives to beard much more than cedar hives – I assume because of the higher internal temperatures. I have found that I cannot use thymol or other treatments with essential oils as this attacks the polystyrene. I feed both wooden and polyhives with Miller feeders or Maisemore Green feeders, so use solid crown board without feed or ventilation holes.

The polyhives are normally broodless from September until late December whereas wooden hives are broodless from October to mid-January. The queen seems to stop and start laying earlier in polyhives than on a wooden hive and polyhives have a smaller initial brood pattern. I therefore did my oxalic acid treatment on 12th December on all my hives this year (rather than at new year as I used to do. The differences on opening up for oxalic is quite marked. The polyhives have bees mainly at the top, in an open cluster over eleven frames. The ventilated wooden 14×12 hives have bees that are much lower down and in close cluster over four or five frames.

In March on a mild day I open up my hives to check for stores. This is where you really notice the difference. Polyhives have far more bees but far less brood – perhaps 10 seams of bees and one brood frame. The wooden 14×12 has 4 or 5 seams on three frames of



Steam-cleaning Geoff's vives

brood. Stores are also very different. The polyhive has least 6 or 7 full frames of stores, whereas the wooden hives are down to three full frames of stores or less, but have three or four frames of brood to keep warm. This difference is thought to be because bees in wooden hives have metabolised more stores to keep warm and therefore have more water in their abdomen to make brood food – hence why more brood. I am intending to feed a few poly hives 10% syrup to see what effect this has on brood area size.

By mid-April, the poly hives can become full as they still can have lots of winter stores. For these hives, I either spin off 14x12 stores from three frames or replace 3 full store frames with sterilised comb. The polyhives then very quickly overtake the wooden hives and I need place a super ASAP over a QE – just for space and pollen before the spring nectar flows in.

In the flow I have difficulty keeping ahead of some of the polyhives, as they cap honey so fast in poly supers. Anecdotally I get 20% more honey overall on hive that are fully polyhive. However for logistical reason I have to mix poly supers with cedar supers. I have been told that this is because the higher hive temperature help ripen the honey but others say high humidity hinders honey ripening, so don't really know why.

I expected more fanning, bearding and overheating in summer, but I don't see this much. I assume this is because there is lower solar gain through the roof, so the hive temperature and humidity becomes constant (I know my house with it 12" of rock wool is warmer in winter, but not noticeably warmer in summer with the extra insulation). This year my average yield in the apiary was 95lb (4 supers) from cedar hives, and 170lb (7 supers) from polyhives, but those high yields also reflect the good forage.

But there are downsides. The main one relates to cleaning. It is obvious that one cannot use a blowtorch. But



Geoff and his mixed poly/wood hives

even scrapping off wax can damage the inner surfaces, so I steam off all the wax and crud with a wallpaper steamer over an old solid floor. This removes all except propolis and dead flat bees. For propolis I use Fairy bathroom spray bleach cleaner, then I immerse a side at a time in a shallow square potting tray filled with neat 5% bleach for 20mins (that's a lot of Domestos). Then rotate for the next side. It can therefore take one and a half hours per brood box or two supers, and I normally have to throw away my jeans due to bleach marks.

The other problem is over enthusiastic beekeepers or beginners with J-type hive tools, because of the large dents and chips out of the hive shoulders as they lever frames out. I now only allow the scraper-type hive tool on poly hives... and I never ever place a hot smoker on the roof!

Other benefits are no chalk brood, (so far) no nosema and no Winter losses. But there are some very high var-roa loads if the oxalic acid doesn't work. When this is the case, I need to do mid-season Integrated Pest Management such as a brood-break by pre-emptive swarm control. There is also talk on the web that if hives are infected with AFB, special incineration is needed due to dioxins released. This may or may not be true.

I hope this article helps you think about other new things in beekeeping. If the editor permits me, I might write another one as to how polyhives have made me revert to beekeeping methods I learnt at school in the 1950s and 1960s...even though some may call me a heretic!

November Facebook (In)digest(ion)

Postponed from last month due to its 'digestion' (rather than delivery) by an email server somewhere (which hopefully gave it indigestion)... a quick roundup of what's happening on our open Facebook page last November.

Tsieske van den Broek
LBKA member

November was a month full of links to good articles. There was not really anything about the problems in the apiary or the questions about feeding that I expected.

Recommended links

Links to interesting articles were posted.

Kenyan beekeeping innovation: An article (<http://bit.ly/1Tzgnxl>) from IBRA (International Bee Research Association) described how local demand for honey is not met in South Kenya and how mobile phones might be used to help tackle the problem.

Zombie Bee Pest: Another IBRA article (<http://bit.ly/1XTxKzu>) describes the "phorid fly" *Apocephalus borealis* and how it parasitises bees. Once known only as a bumble bee pest, the species has now been found in honey bees in the US. Affected bees abandon their hives at night, dying soon afterwards. It is thought these flies may act as carriers of Nosema and Deformed Wing Virus.

Hive products and Honey: Yet another IBRA article (<http://bit.ly/1XZQvMv>) is an interesting read.

Humans and bees: The Huffington Post reports that humans have been working with bees longer than initially thought.

Stinging in action: The New York Times published an animation of how a bee stinger works at <http://bit.ly/1NJDpxb>.

How Honey Buzzards find pollen. Another IBRA article (<http://bit.ly/1R8vbVV>) describes how the Oriental Honey Buzzard will eat bee larvae and – as the name suggests – honey. Did you know they steal pollen from colonies in the winter? Researchers in Taiwan have now shown they find it using both smell and colour.

Events

Mark attended a talk about prevention of pollinators symposium in Victoria. He mentioned some interesting points from the event about the lack of progress to the national pollinator strategy by the government and how

Buglife reported only a 0.03% increase on new pollinator habitat while we've lost 97% since the 1950s.

Preparing bees for Winter

Around the middle of November, Angela Woods and Karin Cheetah warned that temperatures were about to plummet. Time to replace syrup with fondant, get the mouse guards on and reduce your hives down to single brood boxes before the bees start to cluster.

Mark reported holly flowering near the end of the month, and another report from Emily Scott of a Hebe flowering a week later. I just saw that Richard Glassborow just this week has seen more bees bringing in pollen.

Members helping members

There was a "whodunnit" mystery on some of Frank Ryan's frames that were left out over night. A large proportion of capped cells were neatly eaten away. At first the heist was pinned on an innocent-looking slug, but it was concluded that it could not eat that much. A rodent would leave wax cappings and a wax moth was not to blame. The mystery remains unsolved...

Eddna mentioned a lot of dead bees in front of her hive. The problem couldn't be solved because she lives in Kenya and there are just too many other factors to make an educated guess... sorry Eddna.

Other content

Eric Tournet, a honey photographer shared his book and exhibition link "The Honey Roads" with some spectacular images of honey gatherers around the world – see <https://www.facebook.com/lesroutesdumiel/>.

December Facebook (In)digest(ion)

And here's this month's – thanks Tsieske!

Tsieske van den Broek
LBKA member

The month started off with reports from various members of bees bringing in pollen. By the middle of the month nothing had changed. Various reports of flying and pollen collection persisted. Mark reported that half of his hives had brood and loads of stores in all hives. Jonathan Lingham also reported stores as did

some others. Everyone agreed it's an extraordinary winter.

Tristram reported on a cluster on the outside of the hive roof. Mark suggested that it could be because the colonies are so big they're clustering above the crown board and so are spilling out of the hives too.

Emily posted a link to an article about "Eat Natural" who are investing £500K to help preserve Britain's bees. They'll be working with the BBKA on a campaign called "Build the Buzz"; more details at <http://bit.ly/1OANN0U>. The snack bar brand wants to boost the UK's honey production

There was discussion about how much a frame of honey is being sold for. A London company is selling a Langstroth frame for £60. Mark mentioned that he has sold Langstroth for £50.

There were also various links to new and interesting articles, literature and videos:

- Details about the Blue Banded Bee and Buzz Pollination are in this video: <https://www.youtube.com/watch?v=KBHrNpgNPBo&feature=youtu.be>
- Details of "Field Guide to Bees of Great Britain and Ireland" are here: <http://amzn.to/1VugE6c>
- Bees and other insect pollinators bring Christmas cheer, according to <http://www.bbc.co.uk/news/science-environment-30575208>
- A study pinpoints where bee declines most affect farmers, details of which can be found at <http://bit.ly/1ML2jeU>.

Adventures in Beeland: The things people want to know about bees

Emily's regular guest article from her excellent blog: <http://adventuresinbeeland.com/>. This month, I've chosen one that tries understand a bit more about those that stumble across her blog, but do also take a look at her more recent article about the unusually warm winter we're having.

Emily Scott
LBKA member

I've been looking back at the web searches people used to find my blog during 2015.

The most popular was 'honeyflow', with 'honey flow' and 'honeyflow.com/commercial' also in the top 10 (the latter demonstrating that some people prefer to



Braulacoeca (top) compared to Varroa (right), Tropilaelaps (centre bottom) and Melittiphis (left). Courtesy The Food and Environment Research Agency (Fera), Crown Copyright.

enter URLs into search engines rather than their address bar). I wrote a post about the Flow Hive back in February: <http://adventuresinbeeland.com/2015/02/22/will-the-honey-flow-for-you/>. There were so many variations on Flow hive searches to find my blog that I should thank the inventors for sending all those visitors my way!

At number 6 was "**braula coeca**", a now rare honey bee pest. I believe this is probably not because a lot of people are looking for information on it but because there's not a lot of information out there. If you write about a niche subject, there's more chance people will find your content. I wrote about this funny little jockey in 2013: <http://goo.gl/Zty8KT>.

People are also trying to find out about chilled brood, stone brood and husbandry methods like shook-swarms and the Bailey comb change. I would always recommend going to the National Bee Unit's Beebase website for expert bee disease and husbandry information you can trust: nationalbeeunit.com – especially their free advisory leaflets, training manuals and fact sheets.

Some of my favourites were the more obscure searches:

- "**pile of dead bluebottles in an old building**"
- "**paw print plum blossom on snow**"
- "**has any one experience of meeting warm sweet honey**" – yep, tastes best eaten straight from the hive
- "**how a university research garden should look like**"
- "**someone who passed the exam has not read the book**" – I wonder how well they did
- "**a honey bee habit**" – many of us do have a bee addiction
- "**show me some lovely elsa cakes please**"

Well ok – cakes made this week by a friend of Elsa's, she kindly brought them down to the apiary for us – they were so delicious.



Christmas fairy cakes

Unknown search terms: 10,726. Google has been encrypting the vast majority of search terms since 2013 – officially to protect user privacy, though funnily enough subscribers to Google AdWords get to see the terms. SearchEngineLand covered this in 2013 if you're interested: <http://searchengineland.com/post-prism-google-secure-searches-172487>

Upcoming events

Sunday 10th January: Monthly meeting: All about wax moth

11:00-12:00 at Fairley House Junior School, 220 Lambeth Rd, London SE1 7JY.

This month we'll be talking about wax moth and other related topics, followed by the usual hot drinks, cake and chat. Meetings are for members only, but you're welcome to come as guest to find out more about our association.

Friday 22nd January: Talk: Tears of Re: Beekeeping in Ancient Egypt

18:30 at Lecture Theatre G6, Institute of Archaeology, 31-34 Gordon Square, WC1H 0PY.

Lecture and book-signing - more details can be found at <https://www.facebook.com/PetrieMuseum/>.

Monday 8th February: The effect of pesticides on bees

18:00 at Jodrell Lecture Theatre, Kew Gardens

The effect of pesticides on bees will be given by Dr Beth Nicholls of the University of Sussex (who gave one of

our Winter Lectures last year). £2 entry. See the full lecture series programme.

Sunday 14th February: Monthly meeting: Spring management and shook swarms

11:00-12:00 at Fairley House Junior School, 220 Lambeth Rd, London SE1 7JY.

Spring management, shook swarms and other related topics, followed by the usual hot drinks, cake and chat. Meetings are for members only, but you're welcome to come as 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 (and offers of help)! We are:

- **Chair:** Richard Glassborow, chair@lbka.org.uk
- **Treasurer:** David Hankins, treasurer@lbka.org.uk
- **Secretary:** Emma Nye, admin@lbka.org.uk
- **Education:** Howard Nichols education@lbka.org.uk
- **Membership services:** Aidan Slingsby, services@lbka.org.uk
- **Forage:** Mark Patterson, forage@lbka.org.uk
- **Resources:** Paul Vagg, resources@lbka.org.uk
- **Events:** Emily Abbott, events@lbka.org.uk
- **Mentoring:** Tristram Sutton, mentoring@lbka.org.uk

Our website is <http://www.lbka.org.uk/>.

