

Brighton & Lewes Beekeepers



A DIVISION OF THE SUSSEX BEEKEEPERS' ASSOCIATION

EDITORIAL

Why do we keep bees?



For some, keeping bees is about the honey. For others, it's about the money. And for others still, it's in some way about the environment: providing pollination services, adding bees to an increasingly insect-depleted world, and compensating for the poisons we humans indiscriminately spray everywhere.

Of course, these are all artificial distinctions, as I would guess that all of us share a love of the world of bees, their amazing physiognomy, unique behaviour as eusocial creatures, attractiveness and the bonus of a honey harvest in the summer and autumn. All of the above in varying degrees, in other words.

But for all that, for all the time, care and devotion—and money—that we pour into our bees, they don't love us. So we need protection against their apparently irrational but actually rational reactions to our arrival, to the seemingly random disruption of their processes and lives.

Yes, there are those who handle bees without protection. Examples exist on YouTube (if you so indulge) of beekeepers managing their bees with just a veil and sometimes not even that. Note though that they are often to be found concentrated in warmer climes, especially in the US. The warmer it is, the less grumpy bees seem to become.

Unsurprising really. As those of us in temperate climes have found at this time of year, when opening up the hive even just long enough to pop a chunk of fondant on top of the frames and keep the bees well-fed until that revelatory first inspection in March or April, the bees don't like it, and show it. Do the bees recognise you, people sometimes ask. No, they don't.

Mine were less than complimentary about my recent fondant feeding, as I released their hard-won heat into an air temperature of around nine degrees Celsius. Had to close them down quickly, both to conserve heat, to protect myself, and to avoid them expending energy flying about in a temperature that would only result eventually in their deaths.

Yet despite their shocking absence of temperateness and gratitude, I shall continue throughout the cold season to think about my bees and their welfare, and will be doing what's necessary to ensure their survival over the next three months or so. And that's what it's all about, isn't it?

Enjoy your Christmas and New Year—as much as you can under the circumstances—and I hope you enjoy too this bumper holiday edition of the newsletter.

Can you contribute?

Do you have interesting photos or video links you'd like to share? Or an insight from your beekeeping that would could enhance the hobby for others? Do you have skills that could be useful to other members? Anything else you'd like to see in this newsletter? Ideas and contributions welcome: contact details on the back page.

Manek Dubash
Newsletter Editor

NEWSLETTER JANUARY 2021

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EVENTS

- AGM is next month
- Winter meetings are back!
- BBKA events (p12)
- See back page for details

NEXT MONTH

- Winter hints and tips
- Your contributions
- Photo Competition results
- Apiary reports
- Committee news
- Asian Hornet update
- News updates

ONLINE

brightonlewesbeekeepers.co.uk



QR link to our website

Apivar can cause odd queen mating behaviour

A recent study in the US has found that miticides such as amitraz—the active ingredient of both Apitraz and Apivar—have unusual effects on the queen's mating behaviour.

Researcher Juliana Rangel, Ph.D., associate professor of entomology at Texas A&M University, said: "Over the past few years, we in our lab as well as people in other labs have noticed that there are some sub-lethal, non-target effects of these chemicals on the very honey bees that we actually want to protect."

So she and five other researchers investigated whether differences existed between mated queens that had been developed from brood cells containing a range of treatments.

The researchers were especially interested in how many drones mate with an individual queen. To determine the number of drone partners, the researchers ran a form of paternity test on the queen's young, specifically the pupae.

They were surprised to find that the amitraz-raised queens exhibited "as much as 40 percent higher effective mating frequency as compared to pesticide-free and other pesticide-reared queens," said research leader Elizabeth Walsh.



An increased mating frequency may sound like a benefit but probably isn't, according to Rangel: "There is an average mating frequency that is probably the evolutionary stable strategy, which means that honey bees evolved this standard mating frequency that allows them to cope well against disease, be productive, and still maintain colony cohesion."

"This higher frequency is not normal, so it's telling us that something in their reproductive physiology is probably somehow compromised."

Walsh said: "These results demonstrate the importance of limiting pesticide use to control *Varroa* mites in beekeeping operations, as we can see that beekeeper-applied miticides can

negatively affect honey bee queen health."

Following their researches, Rangel and her group created recommendations for beekeepers:

- Replace comb every other year because miticides and agrochemicals can linger and accumulate in combs.
- When sourcing wax, choose suppliers that either use no chemical treatments, or at least not very harsh miticides to control *Varroa*, and that also filter reused wax.
- Employ integrated pest and pollinator management strategies, including regularly measuring varroa levels, and, if needed, apply recommended dosages of amitraz or other chemical treatment no more than annually, alternated with other treatments so that mites don't develop resistance to it.
- Talk to local farmers about the timing of pesticide applications so as to limit hives' exposure to deleterious agrochemicals.

Rangel's group plans more studies focusing on the impact of miticides and agrochemicals on honey bees, and particularly reproductive females.

She said: "Continuing to explore what makes a good queen is a very important question to apiculture."

B&L beeks rescue feral colony in Hollingbury

B&L beekeepers rescued an open bee colony in Hollingbury on 30 November. They had built comb in the open some five metres up a tree on lumpy ground, making the rescue difficult as the weather started to turn wintry.

However, B&L members Tony Birbeck, Ken Isted and Heather McNiven between them retrieved comb and bees, and re-homed them in a National hive.

Using a drawstringed, double pillow-case Heather had made to encapsulate them, they cut the comb from the tree. She deposited the stragglers and nurse bees in a National hive and ensured they were well-fed.

On the beekeeping forum, Heather said: "They [Ken and Tony] left a few hundred on the original site, so I grabbed a small branch of leaves and scooted up [the ladder] to dislodge them (cursing I had not taken my beequick spray).

"They all moved from the remnants of comb and didn't re-cluster so we presumed they found the main colony. But it was a good team effort. I doubt they would have survived with one comb of stores and being very open to the rain."

This is the same colony that was photographed by Gerald Legg: see [Photo Corner \(p14\)](#) for more images.



Heather McNiven on the rescue squad

Honey bees use poo paste to deter hornets

Poo paste saves honey bees. At least in Asia it does.

Asian honey bees (*A. cerana*) have evolved a strategy against the Giant Asian Hornet (*Vespa soror*) that involves pasting animal faeces on the front of their hive entrances.

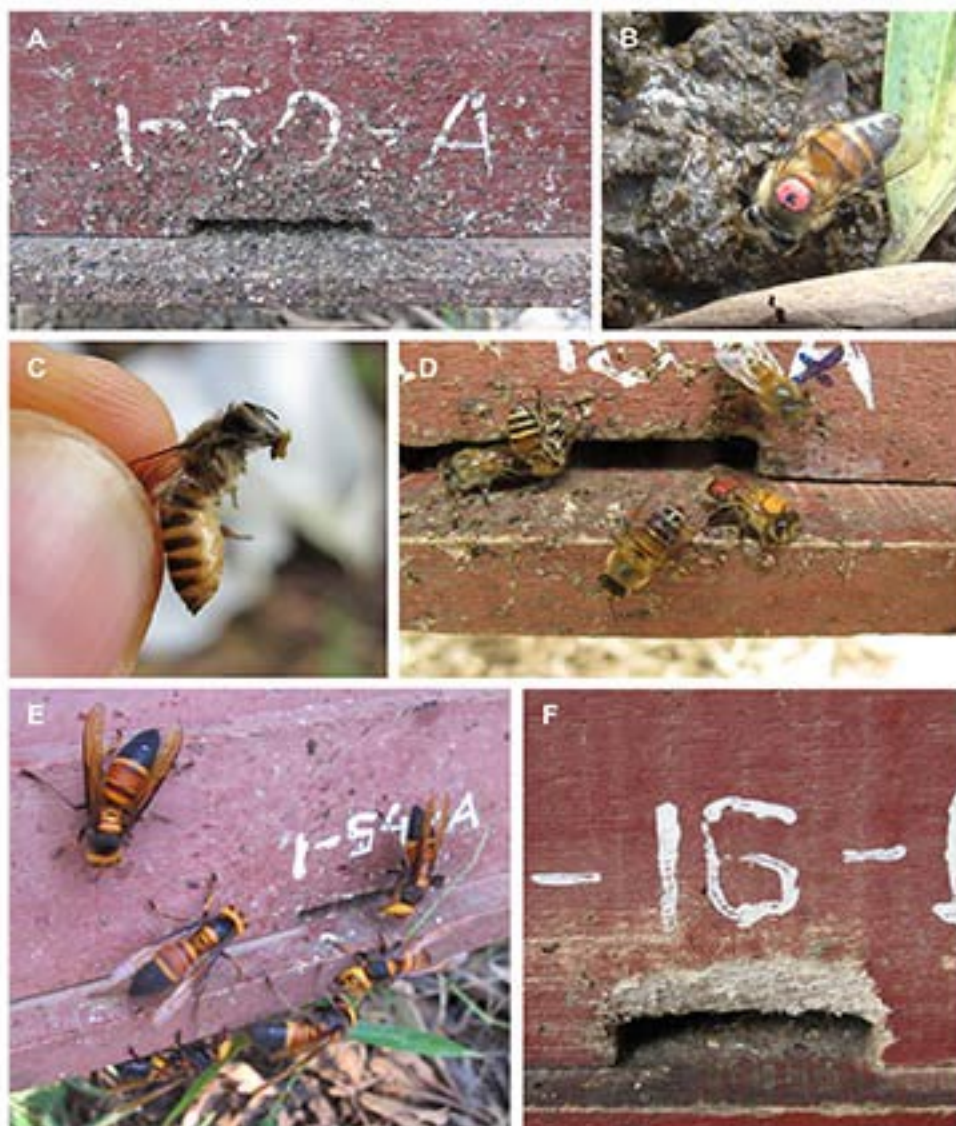
According to the researchers who discovered this behaviour, led by Professor Heather Mattila at Wellesley College in the US: "faecal spotting increased after colonies were exposed either to naturally occurring attacks or to chemicals that scout hornets use to target colonies for mass attack."

"Spotting continued for days after attacks ceased and occurred in response to *V. soror*, which frequently landed at and chewed on entrances to breach nests, but not *Vespa velutina*, a smaller hornet that rarely landed at entrances."

Mattila added: "I was shocked [by the use of faeces] because bees have such a good reputation for being clean. They have hot, wet, permanent homes that are a great place for disease to grow and are filled with babies and food."

Matt Shardlow, from Buglife, said that the bees' use of faecal pellets was "an amazingly sophisticated defence mechanism" showing that surviving predation is a complex task. He said there was no guarantee that native bees could develop defences to hornets, even over thousands of years.

To find out more, the research data can be found [here](#), and there's a Honey Show lecture video [here](#).



Key to images (right): (A) A hive front with heavy faecal spotting around the entrance opening. (B) A marked *A. cerana* forager on a dung pile. (C) A forager holding a clump of faecal solids in her mandibles, captured after leaving a dung pile. (D) A forager applying a faecal spot to a hive front after being paint marked on a dung pile. (E) An entrance-focused group attack on a colony by six *V. soror* workers. (F) Damage to a hive entrance after entrance margins were chewed on by *V. soror* workers (the attack was stopped by experimenters before the nest was breached). Photos: H. Mattila et al

FROM AROUND THE WEB

- [Have a Look at the Fabled Honey Forest](#): In north-eastern Turkey, the beekeeping traditions of the Hemshin people, an ethnic minority originating from Armenia, are both evolving and at risk of vanishing.
- Is honey good for sports? It's said that honey has been used by endurance athletes since the Ancient Greeks. We're not sure if this is 100% correct but since the Ancient Greeks kind of invented the marathon, maybe they did. More about it [here](#).
- Humans have long admired bees for their tidy social order, and many over millennia have voiced a wish that human societies could be more like honey bee colonies. Well, apparently, research finds [there is an unexpected similarity](#).
- Can you use miticides—especially oxalic acid—when nadered supers are installed? The Apiarist [provides the answer](#).
- Webinars and talks in 2021, from [BIBBA](#) and from the [BBKA](#).



Buff-tailed bumblebee. Photo: Ivar Leidus (Creative Commons licence)

Bumblebees can fly sideways through gaps

Bumblebees' flight patterns change to pass through tight spaces based on their size, indicating they have some idea of their own size and shape despite their simple nervous systems.

To test whether bees are aware of their size, Sridhar Ravi at the University of New South Wales in Sydney and colleagues connected four hives to tunnels through which buff-tailed bumblebees (*Bombus terrestris*) had to fly in order to reach food. They then placed a wall in the tunnel, partially blocking it but with a gap through which the bees could fly.

As the bees flew up to the wall, they flew back and forth to get a better look at the gap and then tilted themselves over to get through without smashing their wings into the wall.

The researchers observed 400 flights by the bees and found the amount that the bees tilted depended both on the relative sizes of the gap and on the

bees, as large bees going through small gaps even flew through on their sides.

"It's not that they have a sense of self or would recognise themselves in the mirror, but they do seem to have a better sense of their own size and shape than we thought," said Stacey Combes at the University of California.

This is similar to how people and animals perceive the world, said William Warren at Brown University in Rhode Island. "When you look at a gap you need to walk through, you calibrate that information to your own body size. This emphasises that there's a kind of universality in how we perceive the world, from insects to humans."

It may seem like a no-brainer, but this is actually a surprisingly complex calculation for a simple animal to be capable of, says Combes.

Leah Crane
New Scientist

Beekeepers rescue feral bees on Isle of Man

Jon Burgess, from the Isle of Man Beekeepers, recently rescued a feral colony from the onset of the cold, wet season.

Despite awful weather, the bees were flying and bringing in pollen, but had no stores and little prospect of surviving the next few days, let alone the winter.

After a day's delay due to continued awful weather, Jon and a fellow beekeeper went back in heavy rain, taking a Payne's nuc plus super, with wedges of sycamore so the nest could be suspended.

"Our plan was to cut the nest out intact, so as not to break their comb, which was very brittle due to the cold and wet," said Jon.

So they cut out the nest and carefully installed it, together with a left-over frame of honey and put on a handmade cover with a hole in the middle to immediately feed fondant.

"We fitted the whole nest into the nucleus box making sure they had plenty of air so as not to suffocate," Jon said.

"Without our intervention I have no doubt that they would have perished. We both felt it was a privilege to do this and be able to use our beekeeping skills to help the bees."



Open comb unlikely to survive the winter

January

There's not a lot to do in January—but what there is could keep your bees on the right side of starvation. Note that the National Bee Unit has issued its annual reminder to check for sufficient food for the bees this month.

In last month's tips, we mentioned hive protection measures and mouse guards, and these should now be installed.

Insulation

There is a strong case for putting insulation, such as a 50mm thick piece of Celotex, above the crown board. This can sit snugly under the roof, ensuring that there's little or no opportunity for heat to escape.

The Celotex is cut to size, with its edges wrapped in duct tape, both to keep it from shedding particles and so that it can survive installation year after year. I also use transparent glass quilts rather than solid crown boards so I can check on the fondant situation without having to open the box and so release all the heat they've worked so hard to generate.

You can also wrap the hives in insulation. In the wild, bees choose holes in trees, which surrounds them with a chunky piece of wood to keep out the winter cold. We give them a single sheet of plywood, pine or cedar, which cannot offer the same degree of insulation.

Black plastic sheets are available from the usual suspects, and can be stapled or pinned to the hive to reduce heat loss from the sides of the box.



Winter wrap, from Beekeeping Equipment



Varroa mite mouthparts. Electron microscopy image by Dr. Samuel Ramsey

The black plastic helps retain a layer of warmer air between the hive and the sheet, and may also offer a little warmth when the sun shines.

Hefting

The hive should be nearly too heavy to lift with one hand. Is it too light? If so replace the pack of fondant over the cover board hole, or directly on top of the brood frames above the cluster, ensuring those bees are directly below. If you're using a portion of a block of fondant, clingfilm over the exposed sides to ensure it doesn't dry and harden. If it does harden, a judicious sprinkle of water will re-moisten it.

Varroa treatment

Varroa treatment should be a top priority, if not already performed. The mites are uniquely vulnerable at this time of year as there's little or no brood in the colony, so most of them will be on the bees.

The mites breed fast, and their numbers increase exponentially. However, the smaller the varroa load when conditions start to become favourable to them—in the spring, when the number of bees is increasing fastest—the lower their numbers will be once the next opportunity to treat arrives. This would usually be after the honey harvest.

Sussex University's bee lab, LASI, proved using controlled experiments that oxalic acid vaporisation is the most effective treatment, killing 95% of the mites. That's because OA is both intrinsically effective and difficult for mites to develop resistance to.

I've used a GasVap device from Bridge Cottage together with a sachet of ApiBioxal for the last three years on my bees. Anecdotally, while my colonies have never been varroa-free (I wish!), mite levels have been kept lower than before.

The newest version of this useful tool uses my blowtorch to heat the OA, rather than a car battery, which was a major pain to lug around the hives. The best time to treat is after or during a cold spell, when the brood numbers should be at their lowest.

Weather

If we should get snow, you'll need to keep hives' entrances clear so the bees can conduct cleansing flights, and dispose of the dead bodies. Dead bees being disposed of are—within reason—a good sign, as it shows that housekeeping activity is going on and the colony is alive and well.

A hefty wind storm should prompt a quick trip to the apiary to check that the hives are still upright and on their stands. Strapping should be used if they're in an exposed location.

I also put my ear against the side of the hive to check that I can still hear the buzz, something I find incredibly reassuring.



Snowy hives, from Southeastern Indiana BKA blog

Help!

And remember, the B&L Committee is always ready and willing offer help and advice: contact details are on the back page.

So please, if you are stuck, just ask.

The Veiled Beekeeper



Norman Dickinson
Acting chairman

Words from the Chair

Some will say "thank goodness, 2020 is over and what a terrible year it has been". None of us expected this time last year what would be welcoming us in March. Yes, there had been reports of Covid-19 in China and Italy but we didn't expect the UK to be hit as badly as it was. The first national lockdown put great emphasis on families and friends meeting using the internet.

B&L has not been spared from this, so your Committee has been meeting monthly using Zoom. In some respects this has been a good thing as our meetings were more frequent and we all had the luxury of not having to leave home.

In addition to committee meetings we have started holding general meetings using Zoom. The first was held on 19 November when Bob Smith gave a captivating talk on pollen. We held an on-line quiz on Wednesday 16 December, hosted by Bob Curtis. And we plan further Zoom talks for 2021, with the AGM scheduled for Wednesday 17 February.

We currently have no-one managing our Grassroots apiary, so have relocated the hives to Piddinghoe—a report is on p5. We are looking for a competent beekeeper willing to manage the apiary. Please send all enquiries to our Secretary, Hilary Osman.

You will have received your membership renewal forms for 2021 and as noted in the covering email or letter, our preferred method of payment is via BACS transfer.

I know that quite a few members renewed at the January, February or March meetings using cheque or cash. Unfortunately, as all in-person winter meetings have been cancelled, this becomes more difficult. If you still want to pay by cheque, please mail the completed form with cheque to the Membership Secretary, but I would advise against sending cash through the post, so consider postal orders instead—yes, I know they're outdated but they still have their uses.

Here's hoping for a better year in 2021 and may your honey yields be excellent.



Hilary Osman
Secretary

Your Committee at work

We held our latest meeting at the start of the month, so you should have now received your renewal form for 2021, and also you will get the information for the AGM, which is will be the first to be held via Zoom. There's a bit to do: as well as voting for the various officers and the committee, we've also developed a new constitution which requires voting on.

We are also still trying to get a response from the Bee Inspectors to see if they can hold the Bee Disease day, which was originally planned for June 2020. As soon as we hear from them, we will inform you.

Discounted supplies

Have you bought enough stores for your bees over the winter months? We have managed to source some more fondant, (just a few left....please don't let your bees starve for the price of a 12.5Kg bar), and we also have some candipollen packs too, to give your bees a good start for the early spring.

We are also looking into bulk purchases of frames, wax and glass jars at discounted prices. So when you see the advert which

will drop into your email, please don't delay ordering.

The Committee has also agreed on a new label for the honey from the Brighton and Lewes apiaries. I must say I think it looks very smart, and I hope if you see it, you will like it too. It's already on our Facebook page so do have a look (if you 'do' Facebook!).

Equipment & mentor required

The Apiary Managers have been in conversation with each other, arranging the swapping of equipment. You know what pieces of kit that you like to work with, so if there's some lurking in the back of a shed, you can bet that another beekeeper would prefer it to the kit they are working with.

Please have another look at the back of your shed and rather than burn it or throw it away, if it is of any use, please remember the division. I asked last month if anyone had any spare equipment, but as yet no offers have come forward. Also could you help out and be a mentor for a new beekeeper during 2021? Please let me know.

Many thanks!



Manek Dubash
Asian Hornet Team
Co-ordinator

Asian hornet latest

The Asian hornet situation hasn't changed much since last month: as you might expect, this isn't the time for hornets to start establishing new nests, nor for hanging around outside beehives. Even beekeepers don't do that much in January.

Last year saw one documented incursion, in September around Gosport, with local beekeepers speculating—probably with some justification—that as the discovered nest was near a port, the Portsmouth ferry had brought them over. We can't assume that one event means the beasts have been beaten back—there could still be queens hibernating, awaiting springtime.

There has however been plenty of activity on the Channel Islands and in France, where work is underway to find new methods of eliminating this non-native invader.

Apart from the impact on honey bees, finding and destroying Asian hornets' nests is costly, as well being seriously unpleasant if

you accidentally stumble across a live nest: *Vespa velutina* workers are aggressive nest defenders.

To know more, follow E. Darrouzet's [YouTube channel](#), who is involved in finding and destroying *V. velutina* nests in France.

Though the narrative is in French, for non-French speakers it's clear what he's doing and the videos are instructive. And if your French is rudimentary or better, he speaks slowly and clearly, making him not too difficult to follow.

Finally, the evidence for the UK Asian hornet incursions being invaders from Europe rather than imported directly from China has been published in *Nature*. The paper is [here](#).

It remains only to wish you a Merry Christmas, enjoy what's left of your honey, and see you at the January meeting (the Dave Goulson talk) and at the AGM in February.

From our apiaries: Barcombe, Grassroots, Hove & Piddinghoe



Barcombe

Well, so much for a quiet couple of months at Barcombe. The focus in November was replacing the old shed which was past its best: it had a number of holes around the bottom where mice had got in, a door damaged by a squirrel a few years ago, and gaps in about every wooden board which allowed wasps to get in throughout the summer. A plan was hatched to replace with a more secure metal shed which I had convinced Mrs Toni Birkbeck would only take us a day to do...

A new base was constructed and the panels slowly screwed together. Rain

stopped play for a while and we had to deploy the trusted Park Farm Cottage Gazebo to keep dry and working.

Unfortunately though the "done in a day" plan was scuppered when I slipped from the steps and stupidly grabbed one of the panels cutting my hand quite badly. A quick trip to A&E and 12 stitches later meant that finishing the job would have to wait till next weekend, which is exactly what we did and the new shed now has pride of place in the Apiary (being shown off by Mrs T—right).

Now, although the old shed had seen better days, I sneakily advertised it on



Facebook as free to collector, and I'm pleased to say that a lady came and collected it to use as a chicken house on her small-holding and sent me the picture (overleaf) of said chickens enjoying the shelter, I'm so pleased it didn't find its way to a bonfire and lives another day for a very worthy cause!

Last month I reported that the top bar hive and WBC hive was transferred to Grassroots and that Barcombe would therefore go into winter with seven colonies. Unfortunately one colony, which I noticed had very little brood in September decided to go

(Continued on page 5)

(Continued from page 4)

AWOL. They weren't short of stores so I can only assume the bees deserted the hive due to queen failure; they were very aggressive bees too, which seems to support this theory. So now Barcombe is down to six colonies.

Due to the warm autumn, I've been concerned that they are using up their stores quicker than I would like, some colonies are on their fourth takeaway tub of fondant already so I'll be keeping a very close eye on that throughout the rest of the year and into spring, especially if it warms up again. I will also take advantage of this cold spell we're having at the moment and deploy the GasVap tool while there's little to no brood on the frames.

Merry Christmas everyone and hope to see you in a more normal new year!

Tony Birbeck
Apiary Manager

[Thanks to Tony for the words, photos, and for continuing through thick, thin, and a trip to A&E. Best wishes for a speedy recovery, Tony! Ed.]



The Barcombe shed gets a new lease of life

Grassroots

Dateline: Wednesday 9 December 2021
Weather: Cold, temperature ~7-8°C

It was a cold, clear day as Ian White and I arrived at the Grassroots Apiary with the plan of moving hives to the Piddinghoe Apiary as currently we don't have a manager for Grassroots. I hadn't been to the apiary for about five



Grassroots Apiary—as was...

weeks so wasn't certain what we would find. We found a top bar hive, and four hives each with four to five supers on, so we weren't certain if we could get them into our cars. However, the top supers only had feed and insulation in and a quick measure-up showed that I could get two in my car and Ian the other two in his. The top bar hive could stay for the moment.

We began by splitting each hive down and blocking up the entrance before strapping the boxes together. We managed to get two hives in my car and two supers, and one hive in Ian's, also with the additional supers.

When we came to block up the entrance to the fourth hive we were inundated by angry flying bees, who were not too happy that we were messing around with their home, so we made the decision to put the insulating super back and leave them for another day.

What followed was a gentle drive from Burgess Hill to Piddinghoe with no strangers on the loose.

On arrival, we carefully placed the hives on pallets, raised up off the ground by concrete blocks. The entrances were all opened up and the insulating supers put back on, and a few curious bees came out to find new surroundings. More followed over the next 20 to 30 minutes and once we



Grassroots hives removed to Piddinghoe.
Photo: Norman Dickinson

were happy that all was good we left them to it.

When we get a forecast of temperatures below 8°C and dry weather, we will relocate the remaining hives to Piddinghoe, but that probably won't happen until some time after Christmas or in the New Year.

Norman Dickinson



Hove Apiary

Hove

Nothing to report this month.

Judith New
Apiary Manager

Piddinghoe

My second visit to Piddinghoe was in the pouring rain, again to check if the three original hives needed more fondant. There was no need to worry as all were still using their own stores so that was good. I hope that rain won't be a feature of Piddinghoe in the coming year.

Norman and I moved three hives to Piddinghoe on a temporary basis for the winter—see above. I plan to leave them as is to demonstrate different beekeeping methods.

Ian White
Apiary Manager



Piddinghoe Apiary (looking east at the original hives)

Photography Competition 2020: winners announced

Congratulations to Paula Greening for producing some fantastic photographs and winning both Classes and overall Best Photograph. She will receive her prizes in due course. Thank you to everyone else for entering; it gave our judge, Gerald Legg, a difficult job to choose the best, so thanks to Gerald. Head on over to the website to view them in their full glory [here](#).

Category One: Bee-related



1st Paula Greening



2nd Hilary Osman: Hives on a hill in Bulgaria



3rd Paula Greening: Bee Diving

Category Two: Close-up



1st Paula Greening



2nd
Hilary Osman



3rd Glen Patrick

Membership fees are due on 1 January 2021

Just a quick reminder that membership of the Division runs from 1 January to 31 December, so annual membership fees are due now.

You should already have received a reminder and a membership form but if not, please contact Membership Secretary Norman Dickinson (contact details on [back page](#)).

Discounted supplies are now available

We have sourced more fondant (just a few left now) and some candipollen packs too to give your bees a good start for the early spring.

We are also looking into bulk purchases of frames, wax and glass jars. Look out for the email with details, and please don't delay ordering. Contact Norman for details.

Swarm co-ordinator and Treasurer vacancies

Brighton & Lewes Beekeepers is still looking for a swarm co-ordinator—the holder of the mighty swarm phone—and a Treasurer.

If you'd like to help the Division and take on one (or both??) of these roles, or can suggest candidate(s), please contact Chairman Norman Dickinson (contact details on [back page](#)).

Winter meetings 2021

Can't do face-to-face meetings? Covid won't stop us!

We hope you enjoyed the first Zoom meeting on 19 November. Feedback was positive so we're planning more. And then we held the Christmas Quiz, thanks to Question Master Bob Curtis. Sadly, attendance was poor: what did we do wrong? Please let us know.

Speakers at our 2021 meetings include Prof. Dave Goulson and Celia Davis, please check the back page or the [website](#) for details.

In particular, we hope to see you at the virtual AGM on 17 February 2021.

Links to virtual meetings will be sent out 24 hours beforehand.



Book of the month

Why not curl up with a book that helps you plan for the year ahead?

Our library has a number of such books, including a new addition, *Beekeeping for Beginners* by Andrew Richards. A technical writer by profession and a distinguished Scottish Beekeeper, Richards taught the craft for many years to generations of aspiring beekeepers. His apiary, based in the Scottish lowlands, provided the inspiration for this book. It has since been updated by John Phipps, a retired teacher of Rural Science.

To borrow it, please contact B&L Librarian Dominic Zambito, whose contact details are on [the back page](#).

News and updates from the B&L Facebook group



B&L Beekeeping Division

Private group · 65 members



It's been a few weeks now since we set up the Facebook group, and it's been encouraging how many people have joined—about one-third of the membership so far.

Over the last month, diverse topics have included:

- The bare bones left in Ian White's apiary
- Links to information about brood breaks and varroa

- Designs for our new honey label
 - Lots of bee parts on the OMF
 - A horrible picture of wax moth infestation
 - Open colony rescued at Hollingbury
 - Results of the B&L Photography Competition
 - Discussion about the GasVap for OA sublimation
 - Updates from members' fondant feeding experiences
 - Asian hornet nest destruction videos (very satisfying!)
 - A couple of bumblebees—er—at it
 - Varroa control and the efficacy of Apistan
 - Wax refining
- ... the list is long and interesting.

So if you'd like to join the group—and about a third of our membership have already done so—please jump in! The water's warm and the atmosphere friendly.

To join, log into Facebook and search for B&L Beekeeping Division. Note that we won't be admitting anyone whose name has not first been checked against the membership list.



Christmas Quiz—the questions

We held a Christmas Quiz on 16 December. If you didn't manage to attend, here's the quiz in full, organised into four sections. You can test yourself using the answers below.

A: The Bee

1. How many eyes does a bee have?

- a. 2
- b. 5
- c. 7

2. How many days does it normally take the Queen to emerge?

- a. 12 b. 16 c. 21

3. Where on the bee is the Nasonov gland?

- a. Head
- b. Thorax
- c. Abdomen

4. What will be the 2021 Queen colour?

- a. Blue
- b. Green
- c. White

5. Approximately how many workers are on a BS National brood frame?

- a. 7200
- b. 4900
- c. 6100

B: The Hive

6. How many nails are required for a National Frame?

- a. 9
- b. 11
- c. 12

7. Which hive has an outer skin?

- a. William Broughton Carr hive
- b. Langstroth hive
- c. Warre hive.

8. Which of the following hives have the largest frames?

- a. Commercial
- b. Dadant
- c. Smith

9. Which of these hives uses top bee space?

- a. Smith
- b. Commercial
- c. National

10. What is considered the correct bee space?

- a. 6mm
- b. 7mm
- c. 8mm

C: Bee Diseases

11. Which of the following are notifiable diseases (may be more than one answer)

- a. AFB
- b. EFB
- c. Asian Hornet

12. What is Chalk Brood

- a. Bacteria
- b. Virus
- c. Fungus

13. What size is the Asian Hornet compared to the European Hornet?

- a. Smaller
- b. Bigger
- c. The same

14. When would you feed sugar syrup at 1 to 1 ratio?

- a. Spring
- b. Autumn
- c. Winter

15. What do bees use as their main source of protein?

- a. Nectar
- b. Pollen
- c. Propolis

D: Seasonal

16. Which of the following would bees find most useful?

- a. Holly
- b. Ivy
- c. Mistletoe

17. When is the best time to apply oxalic acid sublimation?

- a. December
- b. June
- c. March

18. What sort of honey comes from the Christmas tree?

- a. Linden
- b. Honeydew
- c. Manuka

19. In folklore, what do bees do at 12am on Xmas Day?

- a. Cluster on the outside of the hive
- b. Hum
- c. Buzz a carol

20. What drinking vessel would the Vikings use for mead?

- a. An animal horn
- b. A wooden bowl
- c. A silver goblet

Christmas Quiz—the answers

- Section A
- 1. b. 5
 - 2. b. 16
 - 3. c. Abdomen
 - 4. c. White
 - 5. b. 4900
- Section B
- 6. b. 11
 - 7. a. William Broughton Carr hive
 - 8. b. Dadant
 - 9. a. Smith
 - 10. c. 8mm
- Section C
- 11. a. AFB & b. EFB
 - 12. c. Fungus
 - 13. a. Smaller
 - 14. a. Spring
 - 15. b. Pollen
- Section D
- 16. a. Holly
 - 17. a. December
 - 18. b. Honeydew
 - 19. b. Hum
 - 20. a. An animal horn



Don't forget to feed your bees, warns NBU

The [National Bee Unit](#) has issued a reminder to monitor your colonies and feed as required—which at this time of year means fondant—to prevent starvation.

A standard National colony needs between 20-25Kg of stores to successfully over-winter: fondant should be used at this time of year, and be placed either above the crownboard or directly on the frame top bars.

More details [here](#) [pdf].

Can sugar dusting remove varroa?



There's been some debate as to whether you should dust bees with icing sugar. B&L beeks have discussed this many times over the years but new

research warrants another look. So, let's wrinkle out the facts.

Proponents say that it encourages bees to conduct grooming behaviour, because brushing the sugar off also removes mites. However, we now feel that this varroa control method has drawbacks, leading us to conclude that, while not damaging, dusting may be ineffective, and could contaminate your honey.

The main reason dusting is unlikely to remove the most damaging mites is that they mostly live not on the surface of a bee's body, where they can be seen and brushed off, but between the bees' abdominal plates.

Varroa mites lodge themselves there to feed off a bee's fat body, as we saw from the research undertaken by Dr. Samuel Ramsey, highlighted in a story we ran in last month's newsletter.

Dr. Ramsey found that the mites embed themselves and are solidly fixed to the bee, as he found in the lab when

trying to remove a mite but was unable to do so without leaving the feet behind. It would appear that no amount of grooming by a bee is likely to dislodge such a mite.

Another reason why B&L Beekeepers no longer endorses dusting with icing sugar is that it could contaminate the honey, which would make it unsuited if not illegal to sell as pure, raw honey. In taste tests of honey taken from hives where icing sugar had been used, it was found that the honey was definitely sweeter than honey taken from hives where icing sugar had not been used.

And finally, with the advent of oxalic acid sublimation, we now have a method of treatment to which *Varroa destructor* is unlikely to develop resistance.

While you as a beekeeper are of course free to treat for varroa as you see fit, you should, we feel, do so in full command of the available facts.

Your thoughts on the matter?

BBKA publishes talks by bee scientist Tom Seeley online



Prof. Tom Seeley

Fans of beekeeping scientist Prof. Tom Seeley have a treat in store.

The BBKA has arranged for videos of three of his lectures to be made publicly available for free.

Seeley, a professor at Cornell University in the US and author of a number of influential books about bees, was to have been a speaker at the 2020 Convention. This didn't happen for obvious reasons, so these online videos replace what would have been his presentations.

The descriptions below are Seeley's own.

1. **Bee Hunting.** This presentation will show you a fun way to locate wild colonies of honey bees, using the tools and techniques of a bee hunter. It is a kind of treasure hunt, though these days the treasure is the discovery, not the honey in the bee tree. Sometimes, though, it will lead you to a beekeeper's hive, but that is fun, too!
2. **The Lives of Bees.** This presentation will give you an overview of what is

known about how honey bee colonies live in the wild, that is, when they are not living in a beekeeper's hive and are not subject to a beekeeper's manipulation. In short, it provides a look at the true natural history of *Apis mellifera*, at least for the colonies that live in the countryside around the small city of Ithaca, New York (USA).

3. **Darwinian Beekeeping.** This presentation provides an introduction to a way of being a beekeeper who wants to let his or her colonies live as naturally as possible. This is an approach to beekeeping that is only relevant for a small-scale beekeeper, one who has just a few hives, and for a beekeeper who does not seek to get a lot of honey from his or her bees. It is appropriate for somebody who wants to relate to the bees more as a bee watcher than as a beekeeper.

The BBKA web page containing all three videos is [here](#).