



**THE LEEDS BEEKEEPERS ASSOCIATION  
BRANCH OF THE YBKA  
AFFILIATED WITH THE BBKA**



# *“The Leeds Beekeeper”*

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Well I am out of turkey sandwiches, the tinsel has been taken down from around the hive door and a New Year has begun. Jack Frost has been out in force over the last week and thus Camilla and her subjects have not ventured from the hive. A bit of festive fondant has been added to make sure the bees are well fed heading into Spring. Just the one beekeeping ambition this year; a jar of honey, is that too much to ask?

### CHAIRMAN’S NOTES

Well hello, I trust that you all had a wonderful Christmas and Santa brought you all that you wanted?

Now back to reality and all those cold dark days ahead. January is the quietest of months for the bees although they may be active on warm sunny days collecting water or taking essential cleansing flights. If any pollen plants are still in flower they may even collect some pollen but most of the bees are very wise and stay clustered with in the hive.

I received an email from the NBU the other day saying due to the un-seasonally warm weather it would be advisable that you check your colonies for food so keep hefting your hives as it was very mild on Christmas Day; 15 degrees. If you think your hives are light get some fondant. It is available from the shop. Here is a bit of wisdom for you, it’s better for the bees to be looking at food rather than looking for it.

The annual Christmas dinner was a great success as all of us that went thoroughly enjoyed ourselves and a big thanks to our new secretary Val Danson for organising it. So there's not much else for me to say except to wish you all the very best for the New Year and a happy and rewarding beekeeping year.

*Duncan Brearley*



© Gregory Austin

## LISTED BEE BOLES

One of the more unusual items to gain listed status last month was in fact bee related. A row of bee boles at Dannonchapel Farm, St. Teath, Bodmin, dating from the late eighteenth or early nineteenth century have been given grade II listed status. The boles are described as a good example of a Cornish method with distinctive 'V' splayed piers.

Bee boles were originally used to house a skep to provide protection for bees before the introduction of wooden hives as we would know now. The bole keeps rain and wind away from the skep (and subsequently the bees). They are often found in south facing walls and around 1600 known sites exist in the UK and Ireland.



*Bee Bole at Dannonchapel Farm © IBRA*

Yorkshire is five bee bole recesses, mostly located in gardens and orchards. Whilst most bee boles are on private land there is a database which shows those known in the local area should anyone want to know those that are accessible.

<http://ibra.beeboles.org.uk/>



*Bee Bole at Temple Newsam*

The largest number of bee boles recorded in one place in England is an old drystone wall near Glaisdale (No.1529 on the IBRA Bee Boles Register) which houses 77 recesses. A conservation project managed by the North York Moors National Park Authority is helping to protect and preserve these rare nesting places for bees, which date back to the 18th century. The average number for other such walls in

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*Not renewed your membership subscription yet? It is now overdue!*

*So add it to the top of your jobs list.*

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## USELESS (BUT CLEAN) BEE SUITS

I wrote a recent piece on washing bee suits in washing soda. Now I never get ANY feedback from articles, but this one produced a flurry of interest and washing advice! Try boiling, try bleach, soak then wash in washing soda etc. So this time, in a craven attempt to win readers, I'm hanging this piece onto the same theme - one of my more useless bee suits.

It was a suit whose main zip had broken but was still perfectly serviceable because (for some reason) it had press studs to do up the front. Never one to throw away perfectly good equipment (thrifty not tight) I continued to use it. Amidst one busy inspection in an out apiary I suddenly froze. I could feel bees wandering about in my boxer shorts! Nothing, but nothing, focuses the attention more than bees inside your suit let alone bees crawling around inside your boxer shorts!

So what to do? I ruled out stripping off to find and release the offenders as I was amidst a busy apiary. There were far more outside than in. Nor could I trace and squash them. The material (Bee suit and jeans) was far too thick. I did consider, albeit briefly, hitting the area to try to kill them - but for obvious reasons rejected the idea. So I decided to walk like John Wayne back to the car and go home. Sorts things out there. Sadly the bees had other ideas. In quick succession I received two stings. And my, my how they hurt. Both close by to each other. Truly a new experience in getting stung. I continued home and hoped that there were no more lurking about.

It was only at home that I could strip off to examine the damage and discover how on earth did they get in there? The answer to the former question was not much damage. But how did they get there in the first place? Well they entered via the gaps between the press studs. Then they travelled down (don't you believe those who tell you that bees always go upwards). There they found a small tear in my work jeans, on the upper inner thigh, where I'd ripped a small triangle when going over a barbed wire fence. Having traversed that obstacle it was a fairly short hop into the boxers! Easy.

And the bee suit? (I know that this is what you're really interested in). I discarded it, but (waste not want not) it was washed (Ariel colour tablets) and taken to be sold at Beverley Beekeepers annual auction.

*Dave Barrett*

## HUMMMMMM

For those of you who don't watch QI, why do bees hum? Well there are two answers to this; firstly they beat their wings at around 1500 bpm which causes an audible sound. Secondly some species of Bumblebee use it as a method to gain pollen. In this case the bee approaches the flower, grabs on, buzzes with all of its might exerting a force up to 30G, until it shakes the pollen out of the flower.

<http://www.bbc.co.uk/iplayer/episode/b086ykrp/qi-series-n-10-naturenurture>

## JANUARY 2017, AN UNUSUAL WINTER

Something I do at least once a month in Winter is check my out apiaries; I have three. I pop in and make sure that nothing has blown over and in January I start hefting hives and nuclei to make sure they are not short of stores. The hives shouldn't be as they all had excessive amounts of stores to overwinter but honey bees do know how to throw up a surprise or two.



*Plenty of workers here*

I hefted all my colonies and none of them were light however this was not the same for the nuclei. The nuclei were all lighter than I am happy with.

It was 10°C on Monday the 8th January at Methley. This was a perfect time to split hives to do a visual inspection and open nuclei to add fondant. I like to photograph my bees so I took a few shots of some of the boxes that I opened, all the nucleus had fondant added. None of the colonies needed fondant adding. I also use a pollen

substitute. This was added to all boxes opened.

Included are two photographs. One of my colonies which I am very happy with, I have never seen a colony this strong in January since I started beekeeping 6 years ago although opening colonies like this is only something I have done in the last three years and only then on warmer Winter days. This was one of the strongest. All the colonies were strong. The second picture is a double nuclei, again all nuclei are all well populated.

I will be re-attending the apiary in a week to see if the nuclei have taken the fondant or not and if they have, I will be adding some more.

*Chris Barlow*



*Bee Bole at Dannonchapel Farm ©  
IBRA*

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*Remember to heft your hives and if they feel light add some fondant to  
keep the bees going over Winter.*

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## BEEKEEPING WITH ASIAN HORNETS IN FRANCE

After the hornet incursion into Britain last year the following article was written by a beekeeper originally from the UK, now living in southern France and his five-year struggle with these aggressive bee eaters.

Michael Judd, originally from England, keeps ten hives at an elevation of 789 meters (2588 feet) under a small wild-flower-covered mountain near the village of St. Vallier. These higher elevation hives have remained free of the hornets. But he also keeps a couple of small hives in his backyard where the hornets thrive. Here in his backyard is where he has been experimenting with control measures. Here is Michael's take on controlling Asian hornets:

*I have lived with Asian hornets for about five years. At first, I lost five hives, then I improved the defences and so did the bees. The first thing to know about the Asiatic hornet is that, unlike its European counterpart, it hovers in front of a bee hive. This makes for the first line of defence for the beekeeper. A badminton racquet makes it really easy to swat them. I am fortunate that I can have bee hives in my garden so my physical presence gives me the ability to visit often during the day and swat them. A more remote location makes this somewhat difficult.*

### **The Asian hornet life cycle**

*Asian hornets all die off at the end of the summer, in my case around the end of October. A mated queen or queens then go and hide in a tree or in the ground. They emerge in spring (about April) and search for a place to make a temporary nest. This is a small one, possibly the size of a golf ball. She lays a few eggs there, yielding 6 or 8 hornets. They then search for firstly food and secondly a place, usually high up a tree, to make the main nest.*

*The hornets are said to only want protein at the end of the summer. Before that they feed just like bees and sometimes together on the same plant. I spotted them in April (South of France near Nice) on a plant that was flowering.*

### **Trapping the queens**

*I put out a trap made out of a plastic water bottle with a bought product that is a special hornet attractive. This is important, as catching the queens at this time reduces the chance of a large colony being formed. At this time of the year I catch and also swat a reasonable number of hornets, sometimes up to 10 a week. Once the main colony has been formed, with a nest that can be several feet round, there seems to be little chance of finding the nest, which is usually high up in a tree.*

*For a while during the early summer the hornets seem to disappear. But not completely, as from time to time I see one or two around my hives at the other side of my garden. But by the time mid July/August comes along the hornets can be seen flying about the hives.*

### *The attack*

*The hornet hovers outside the hive and awaits a departing or returning bee and catches it in mid-air. It takes the bee to a tree where it takes the wings and head off and then the hornet takes the remains to its nest.*

*The hornet will only go into the hive when the bees are very weak, not flying, and unable to attack in numbers. I have seen the bees on an entrance or inside the muzzle attack and kill a hornet, so generally the hornets do not seem to like going in the hive. However, I notice that in mid to late September, the hornets are desperate for protein and they get bolder.*

### *How the honey bees react*

*The reaction of the bees is to feel trapped in the hive. There is a siege going on and their flights are down to an unsustainable minimum. Without any action, the colony will simply reduce in strength until it fades away. In my first year, I found 2 or 3 very small (the size of a tennis ball) swarms in the garden. I got the impression they swarmed out of total desperation. At other times the bees ate all their stores and simply died.*



*Here you can see hornet “muzzles” on the hives. The bees pass through freely, but the hornets are reluctant.*

*I have noted and read on blogs that up to about 3 hornets around a hive allows the bees to more or less fly normally, but any more than that forces the bees to stay in the hive.*

### *Control measures*

*First, I put out several traps. Some made of plastic water bottles and some purpose-built wasp traps. I use two different liquids. The first is an “attractive” bought from my bee association. Sometimes I add a little honey-soaked beeswax. The second is a mixture of white wine, apple vinegar, and cassis. Both of these work very well. A lot of people recommend beer, but I find that it does not work. This year I put both mixtures out in 6 traps (3 each). At the height of the rush, I was catching between 10 and 20 a day.*

*The next thing I do is to reduce the entrance to the hive. This, of course, makes it easier for the bees to defend their entrance. Then I add what the French call a “muzzle.” It is a wire contraption (see photo) with the holes in the wire measuring 13 mm square (0.5 inch). This allows the bees to enter, but the much bigger hornets are very reluctant to enter as the bees attack them inside. This allows the bees a safe area where they can see the hovering hornet, and either go the other way or exit later.*

### *The bees' line of defense*

*What I noticed with one of my hives which had Italian bees is that they set up a line of bees on the floor of the muzzle and this acted as a defence as well as a landing and take off strip for arriving and departing bees. They were also in position in large numbers to attack any hornet silly enough to get too close. It seems to take the bees about 20 minutes to kill a hornet. It is also interesting to note that a guard bee is often seen scouting around the hive after I have swatted hornets. The scout appears to give the "all clear" when she does not see any more hornets.*



*Here you can see a fabric skirt added to the front and back of the hive to prevent the hornets from hanging around underneath. This made it easier to swat the hornets*

*my racquet, the bees would not react. I would calmly swat, say, a couple or more hornets and the rest would disappear. They are very frightened of me, it seems. The other thing I noticed was if, for example, there were three hornets in the area and I swatted all three, it would take over an hour before any returned.*

### *Everything taken together*

*The object of all the defences is to make it more difficult for the hornet to be able to sustain an attack. To this end, I have been moderately successful as I have kept hives operating, harvested honey, and got the colony through the winter.*

*None of these measures on their own make much difference. However all measures together allowed me to keep the hive strong.*

*Michael Judd*

*It will only be a matter of time before the LBKA shop is stocking badminton racquets alongside the hive tools.....*

*This year I noticed that the hornets, rather than hovering directly in front of the hive entrance while waiting for a returning bee, would hover underneath. I found it therefore impossible to swat them with my badminton racquet. So I took a piece of old bed sheet and cut it to fit to the base of the hive and tall enough to get to the ground on the back and front of the hive. This really seemed to annoy the hornets as they attacked the sheet and could not get to the bees. The result, for me, was they had to hover in front to the entrance and I could swat them easily.*

*I would also note that when I approach the hive with*



*The honey bees set up lines of defence to guard against the hornets. It takes about 20 minutes for the honey bees to kill one.*

## WATER FIGHT?

Remember those balmy hot days we occasionally get in Yorkshire when knotted handkerchiefs are placed on heads and the tinkle of the ice cream man can be heard down the street? Well it turns out that bees have a strategy to ensure that those bees within the hive during hot spells do not overheat during these hyperthermic conditions.

Honeybees have several ways to reduce the temperature within the hive; reducing hive occupancy to increase air flow, fanning of the nest and of course water. It is the job of a specific group of bees to leave the nest and “forage” for water. Upon arriving back, the water foraging bees are met by hive bees who take their liquid cargo to be used in the hive. At temperatures in the hive above 40°C bee larvae can dehydrate and die and thus it is important to be able to control the hive temperature.



*Thirsty Bee © Dave Schiefelbein*

Researchers wanted to understand how the water collecting bees knew additional water was needed by the hive. To investigate this researchers took their test hives, exposed them to hot temperatures and reduced the amount of available water. Under these conditions when water foraging bees returned to the hive their cargo was immediately unloaded but the hive bees kept pestering the water collectors for additional water by touching their tongues to the mouths of the water collectors, encouraging them to regurgitate more liquid. As the water collectors had no more water to give the immediately flew back out to retrieve more water.

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*“They’ve given up their water and they’re still being begged, almost pestered, that motivates the water collectors to zoom right out and get more.” Thomas Seeley, Cornell University*

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Once water was restored to the hive after a day of hot conditions, the bees looked to stockpile water stores within the hive. Some water was stashed in honeycomb cells, but obviously this is prone to evaporation and thus several dozen bees were transformed into living water bottles. By expanding a region of their gut they are able to store water which can then be regurgitated to those hive bees that need it when they touch their tongues to the “water bottle” bees.

On the subject of water sources research suggests that bees tend to prefer water with a bit of green slime or similar in it. It is speculated that this is simply because bees can smell it and recognise it as a water source, whereas chlorinated pools and similar are a relatively recent invention and thus bees may not have learned to associate this smell with water.

<https://www.newscientist.com/article/2098161-bees-spew-water-at-their-hive-mates-when-the-temperature-rises/>

## BEE AND BUTTERFLY NUMBERS FALL



*Wildflowers have been in short supply this year.*

affecting the populations of insects who feed on them. Lytes Cary, a National Trust site in Somerset, saw their bumblebee numbers drop by 85% as the wildflowers they feed on were swamped.

Now in its 10th year, the state of the nature report 2016 paints a worrying picture for the UK's pollinators. Last years' mild Winter, cold Spring and wet May/ June made for a difficult period for both bees and butterflies with both showing a decline in numbers. It is believed that the wet weather led to a bumper year for grass growth, great news for farmers making silage. However wildflowers and small plants were squeezed out by the strong grass growth, thus

However, there was some positive news, as mentioned in an early edition of the newsletter short-haired bumblebees have been successfully reintroduced into some areas of the UK during the last twelve months. It was also noted that wasp numbers have shown a dramatic decline over the last year, great news for those who want to have a picnic, less good news for the food chain as wasps provide a useful role eating pests.

<https://www.nationaltrust.org.uk/features/the-state-of-nature-report-2016>

## SUMMER MASTERCLASSES

For those of you who haven't been on Webcollect recently this Summer's masterclasses for members have already been announced so now is the perfect time to get yourself booked on to a course and learn something new this beekeeping year, whether it is a different method of swarm control, or taking your bees to the heather LBKA has something for you!

5th April - Pagden Method

3rd May - Catching a swarm

10<sup>th</sup> May - Apiary Hygiene lecture

17th May - Swarm Control - Demaree Method

24th May - Queen Rearing - 5 week course - *Already full, if you are interested in this, please contact [Chris Barlow](#) (education officer) and if there is sufficient interest he will look at offering further courses on this subject in the future.*

26th July - Going to the Heather

13th September - Preparing your bees for Winter

## ASK THE BEEKEEPER

Have you got a burning beekeeping question that you want an answer to? Then please send it to [editor@leedsbeekeeper.org.uk](mailto:editor@leedsbeekeeper.org.uk) and we will do our best to find you an answer!

## 12OZ HEXAGONAL JARS

Hopefully your bees have been busy and you now have lots of honey and not enough jars to put it in.... fear not LBKA have the answer! 12oz (340 g) hexagonal jars with lids are available in the shop at a bargain price of 23p each, they come loose so you can buy as many as you require. Please bring a cardboard box to carry them home in. If you require a large quantity, please email Duncan [thebeeman@hotmail.co.uk](mailto:thebeeman@hotmail.co.uk) or ring him on 07855 308143

Got an article for the next edition? Please email to [editor@leedsbeekeeper.org.uk](mailto:editor@leedsbeekeeper.org.uk) by 31st January

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## FORTHCOMING EVENTS

### January

Saturday 14th - Apiary Day – 10.00 a.m. – 12.00 noon

Wednesday 25th – Winter talk - Bees & Chalkbrood by Dr Sophie Evison

### February

Saturday 11th - Apiary Day – 10.00 a.m. – 12.00 noon

Wednesday 22nd – Winter talk - Preparing honey bees for Spring by Mr Ivor Flatman