May 2025
Issue 254

# BEETALK

Warwick and Leamington Branch of Warwickshire Beekeepers

## SPOTTING A DRONE COMET

At the April WLBK members' meeting Dr Stephen Fleming, co-editor of BeeCraft, explored what is known as Drone Congregation Areas (DCAs). Rev Charles Butler (author of The Feminine Monarchie) may well have heard drones round his village but did not write about them. It was Gilbert White, another naturalist Rector, who in 1792 first described hearing the low humming of drones but was not able to see them. It was another 100 years before DCAs were recognised, and we still do not know how drones identify them!

**A drone comet**

**Below: Dr Stephen Fleming**

Stephen told us about the signs in the landscape to look for - a slope without trees – and suggested mid-afternoon on a warm afternoon from May to July were good times to look. Drones seemed to prefer a light breeze to help them fly fast enough to catch a virgin queen. He showed video clips of a drone comet chasing a queen - around 150 to 200 drones join in the chase with others waiting in the grass or on trees to see if it is worth joining in! Looking at maps of Kenilworth, he thought that the slope in Abbey Fields behind the War memorial was a likely spot, as was the slope behind the Kenilworth Castle Apiary in the castle grounds. When the bypass reopens and the traffic in Kenilworth reduces, we may be able to hear the drones!

Stephen's further exploits in drone hunting have included trying to find out how far they fly. The Scilly Islands Game of Drones has involved marking drones from one island and seeing if they turn up in hives on other islands. Although only a small number of marked drones were found, it was clear that drones would fly at least 3 km, including over the sea.

This was a great talk, educational and entertaining – a fitting end to the Winter Talks programme.

Our next Talk is on **Thursday 18th September 2025** at 7.30 pm at KSCC, Abbey End Kenilworth.

Stuart Roberts will ask: Does a bee collect a teaspoon of honey … and reveal what science and AI tells us. There will be cake!

**Judith Masson**
**WLBK Meetings Secretary**

# BEEKEEPING TASKS – MAY

This year, Spring has been the complete opposite of last year. Whereas last year was wet, this year has seen wall to wall Spring sunshine. It's also been very dry - sure the farmers are crying out for rain. As for the bees, whereas some years you may only tentatively go onto the hives in April, weekly inspections are well underway and our swarm collectors have no doubt been very busy!

If you do spot queen preparations, the easiest thing to do for swarm control are one of these three manipulations:

- Take out the queen in a nucleus (queen, some brood, some stores, some foundation and feed) and leave one queen cell in the old colony.
- Do a Pagden - queen and foundation in a new box on the old site; brood, nurse bees and one queen cell on the new site.
- If you are short of kit, do a Demaree. Queen, one brood comb, foundation and flying bees in new the bottom box, two supers above to give space and old brood and fliers in the top box above all the rest. Separate with queen excluders above the bottom box and the supers.

If you do any of these you need to go back in 5-7 days to remove additional queen cells. It's the secret of making these things work.

**Beekeeping tasks:**

- The mouse guards and woodpecker protection should be off now.
- 'Tis the season for weekly inspections (nine days if you have clipped queens). Look closely for queen cells and make sure colonies have enough stores.
- Add a queen excluder and super when there are six frames of bees (or before) so that you can relieve pressure on the colony. The bees will need space as the population increases and, we hope, when the nectar flow really gets going.
- Do your disease inspection. I usually do it on the second visit of the season.
- Make sure you have spare brood frames - for swarm control. You will need a spare hive and box of frames for an artificial swarm (Pagden) or Demaree. You need a nuc box full of frames to make up a nuc.
- Do a varroa and nosema check. Put the board in for at least seven days, divide the mite drop by the number of days and use the beebase calculator. Treat if you need to.
- If one of your colonies unaccountably does not build up collect a sample of 30 bees. Barry Meatyard or I will do you a test. Just deliver the 30 frozen bees (and your name) and we will let you know. If there is a high level of nosema, its time for a Bailey for a weak colony.
- Remove and extract rape honey as soon as ripe.

**Jane Medwell**
**WLBK Chair**

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# TIMES THEY ARE A-CHANGING

Does the early start of the season this year presage things to come?
WLBK member Lee Franklin has been collecting swarms since March and has been prompted this reworking of the old adage:

*March is spring's false start,*
*a hungry flight with too much heart.*
*A swarm in April, though rare and fickle,*
*can fill your combs and make gold trickle.*
*A swarm in May is worth a load of hay;*
*a swarm in June is worth a silver spoon;*
*but a swarm in July is not worth a fly.*

Lee Franklin, 2025

# HAVE YOU EVER SEEN A BEE COCOON?

After the larva has fully grown, it enters the pupal stage. This is when the cocoon comes into play. The larva spins its cocoon and transforms into a pupa. Inside the cocoon, the pupa undergoes dramatic changes as it develops into an adult bee.

The cocoon plays a critical role in the process of this metamorphosis. It shields the pupa from potential harm or disruption from environmental factors, predators and disturbances inside the hive. Although the cocoon material must be water-resistant, it also must protect the bee from drying, pathogens and parasites. At the same time, it must be permeable to the gases of respiration, including oxygen, carbon dioxide and water vapour. The protective nature of the cocoon allows the bee to undergo significant internal changes. Within the cocoon, the pupa's body reorganises as it transforms from a soft larva into a fully functional adult bee.

"Silk" is a functional term used to describe protein fibres spun by honeybees and many kinds of insects and other invertebrate animals. The spinning of silk by honeybees does not involve either rotating or twisting fibres as is done in commercial fibre production but refers to the process of making an insoluble filament from an aqueous protein solution containing different fibrous and glue-like proteins.

With honeybees, the silk comprises of 4 sub coils within a coiled single strand of silk and the newly spun cocoon looks like a cellophane sack. As the pupa progresses through the miracle of metamorphosis it gets bigger and hence the sack gets pressed into the cell wall. Each time the cells is used to raise brood the cocoon remains after emerging, conveniently locking up the larva waste products which helps with hygiene but inconveniently making the cell smaller internally each time. Is there a correlation between old comb and smaller bees?

Social Hymenoptera insects' (bees, hornets and ants) silk differs chemically from silkworm silk but performs the same principal function i.e. protecting the pupa. Analysis of the mechanical properties of bee silk vs silkworm silk shows greater toughness and extensibility but reduced tensile strength which probably accounts for why we don't use it as a luxury fabric.

The best way to see cocoons is to melt away the wax from the comb leaving behind the cocoons, pollen, propolis and waste products. Honeybee silk remains stable up to 175C, well above the melting point of beeswax (62-64C) and that of steam(105C) so both solar and team extraction can be used to achieve this.

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# SOCIAL PROGRAMME

The date is now fixed for the members' visit to the Warwickshire Lavender Farm, courtesy of Ian Jamie, who spoke at our January Meeting. **SAVE THE DATE 9th July 7 pm**. This is a free event, but it will be necessary to book via the website. There will be a collection for Ian's charities. The café will not be open.

We have had very few recommendations of local pubs for meet-ups! If you want the club to develop a social programme, please suggest a pub, date and time AND be there to welcome other members. Dates and times will be included in the calendar.

**Judith Masson**

# BEE SAFARIS

Safaris are opportunities to see how other bee keepers manage their beekeeping and to pick up ideas and tips. The first safari will be in June, and will be advertised in the on the website, in June Bee Talk and via the Bee Messenger. **If you want to go on a safari, go to the club calendar on the website and book.** Numbers will be limited according to the available space in the host's apiary.

**Judith Masson**

# WINTER LOSSES SURVEY

By the time this issue of Bee Talk has hit the streets, the Branch's second-hand equipment sale will be well underway and purchasers are reminded that, irrespective of any purchases being sold as cleaned or sterilised, you must, in your own interests and those of fellow beekeepers, repeat the process to the required standard. Also used frames and combs should not be purchased as they are prime vectors in disease spread.

**Bernard Brown**

# INTRODUCTION TO BEEKEEPING COURSE 2025 REPORT

This year our introductory course was organised by Marie Day and held at a new venue of Burton Green Village Hall. HS2 were constructing their new railway line straight through the village and in doing so had driven right through the old village hall and so had replaced it with a beautiful new one – one of the few good things to come out of this construction.

Apart from having to get to grips with building and its facilities, the odd technology glitch, presenters bailing out at the last minute, our usual tried and tested programme had to be compressed from two days into one and a half, due to the hall not being available.

25 delegates attended the course along with many experienced beekeepers who sat amongst the trainees while the talks were delivered.

**The man himeslf, Reverend Langstroth**

**Below: Frame building**

The delegates learned about the history of bees, various types of hives, how and why bees behave as they do and what to do about swarming and bee stings.

Following Jane Brown 's talk outlining the fantastic characteristic and behaviour of our girls, they were part through Nicki Maritz's exposition on the history of the hive when, right on cue, who should swing by but the Revend Langstroth himself (see page 4).

The assembled throng were able to hear from the horse's mouth how his discovery of the significance of bee space revolutionised beekeeping and how chuffed he was that, all because of his predilection for champagne, the recycling of his champagne box resulted in his name being perpetuated by the type of hive which has become the most widely used in the world some 175 years after his discovery. Because of his age, he was unable to hang around for very long, but his appearance was most certainly one of the highlights of the first day of the course.

While the programme overrun, concerns that this may not be well received by the delegates were ill-founded as no one left early and all returned the following day.

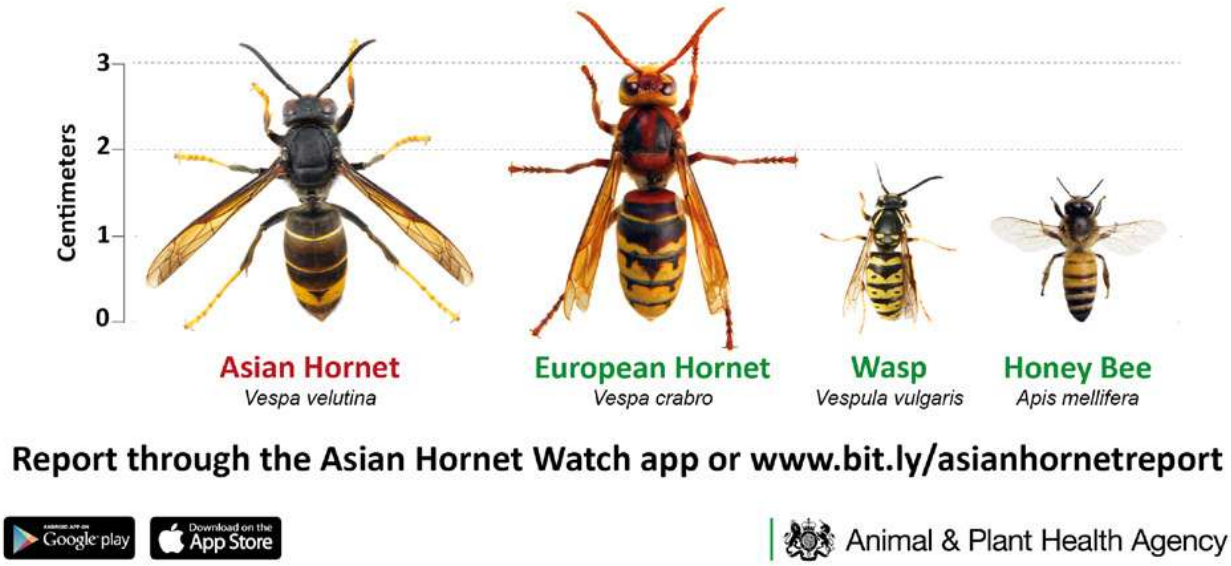
The delegates also had a chance to taste the different types of honey, made a frame each and finally got to visit the apiary of Alan Deeley. They experienced first hand just how it felt to be dressed up in a bee suit, with marigold gloves and wellington boots on a very hot day.

The group also got to witness Alan and Steve Poynter collect the swarm which obligingly had clustered on the roof of a caravan the day before. They watched as they removed the swarm with the help of 'Pamela', the branch's very useful bee vacuum. This certainly gave the previous talk on swarms and swarm collection a whole new resonance.

There was, as usual, lots of lovely cakes – honey cake, Victoria sponges and carrot cake, all made by Marie, along with copious biscuits and of course tea, coffee and squash.

**Val Dillon, Marie Day and Ivan A Perry**

# YLH – THE LATEST BUZZ




Some of you may have read the article in the newspapers a few Sundays ago predicting that we shall experience sightings of YLH this year of at least the proportions of 2023 if not more. This is based upon the experience of Jersey where YLH were first spotted 2 weeks earlier than last year and up until 11th April, ***262 sightings had been reported*** – an increase of almost ***1100%*** over last year, The low activity last year on the mainland is thought to have been weather related but the relatively mild weather over winter and the dry sunny start to Spring this year, will be more conducive not only to the survival of overwintering queens in this country but also to inwards migration from the expansion of YLH populations throughout Europe.

Almost as though the YLH had read these articles, right on time a series of recent sightings in the UK have just been reported by the National Bee Unit.

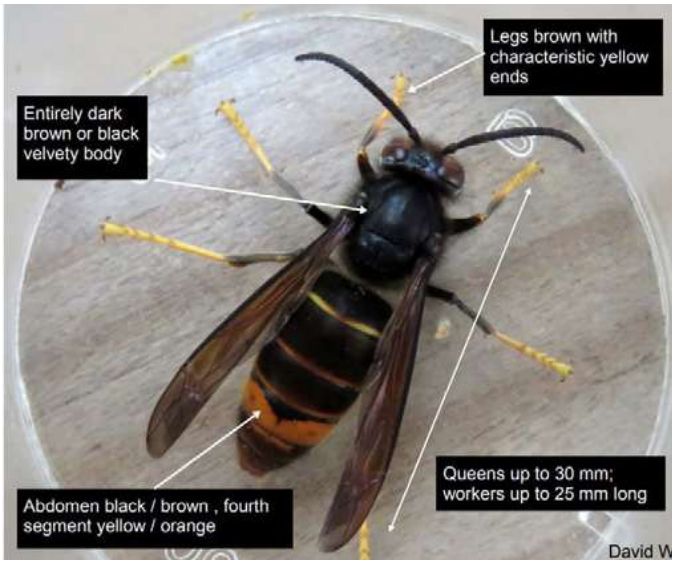
Since 8th April there have been 9 further confirmed sightings to add to the two earlier ones found in Oswestry and Canterbury. Three of the latest sightings were in Southampton. One in each of Eastbourne, Deal, Folkstone Ramsgate and Maidstone. One was caught in a NBU trap and the Southampton ones within 4.5km of a nest destroyed in 2023.

All these hornets were collected by a bee inspector from the NBU sent them to Fera Science for analysis.

Results of these analyses have yet to be received so we don't yet know whether these are domestically overwintered queens or new arrivals from the burgeoning population on Europe.

In all cases, the local Yellow-Legged Hornet Action Teams have been contacted and mobilised to activate their monitoring plans and asked to responsibly monitor in these areas.

Not all is doom and gloom, however. Scientists from Nottingham Trent University have identified and differentiated YLH hovering flight sounds, using inexpensive microphones and an algorithm trained to discriminate between the flight of the predators,




honeybee sounds and general background noise. This should make the monitoring for YLH far more efficient than hitherto. Currently we rely on the coincidence of a YLH flying by just when the monitor happens to be monitoring. This breakthrough will revolutionise this process enabling remote monitoring with minimal human involvement. We have no timeline as yet for arrival of this device on the market.

We are still in a low risk area as far as the YLH is concerned, but we cannot relax our vigilance, so when you are out and about in this glorious spring weather tending to your girls, spend a minute or two on the lookout for this unwelcome visitor.

**Bernard Brown**
**County AHAT co-ordinator**

# BUZZING FOR VICTORY

With the 80th anniversary of the "Victory in Europe" Day commemorations very much in mind, my attention has been drawn to the roles of both bees and beekeepers in war time.

The Romans sent beehives catapulting into the ranks or fortifications of their enemies but there are even earlier reports that honey was also used offensively.

Pillaging and marauding troops intent on foraging were incapacitated by the retreating army leaving caches of honey laced with poison for them which proved irresistible. In Asia, some honeys – that produced from Rhododendron Pontificum - are naturally toxic to man but not to bees. Much the same use has been made of mead making the advancing troops a tad tipsy and therefore easily defeated.

In the second world war honey bees also played a significant part. Not so much as offensive weapons but in many other ways.

- Resistance workers used hives as safes where they could stash forbidden materials.
- Honey was a sweetening agent that existed outside the rigours of rationing and beekeepers became everybody's friend.
- Honey was also used to dress burns and wounds where its antiseptic and anti-microbial properties helped prevent infection and encouraged healing.
- The picture above of the time shows official encouragement self-sufficiency including keeping bees.

Such was the importance of bees for pollination and honey production that beekeepers were permitted a supplementary ration of 10lbs of sugar per hive to feed bees over the winter. Shortly after this was announced, the number of beehives in the country rocketed. It was only after the size of the honey crop was found to be inconsistent with the number of hives that it was suspected that the sugar wasn't reaching the bees. The government's answer to prevent this sugar from reaching the black market was to dye it green. Unfortunately, this resulted in the honey taking on the colour of the dye. Not very appetising!

A similar effect happened when bees were foraging on spent candy tins in the M & Ms' factory in France and, as a result, the frames turned blue!

The issue of a supplementary petrol ration for beekeepers to take their bees to the fruit orchards further encouraged the proliferation of beehives.

Other products of the hive were also put to good use:-

Wax was used for

- candles
- Leather balm for straps and belts
- Boot polish
- As a preservative
- As waterproofer
- As a rust inhibitor
- As a lubricant
- For the Sergeant Major's moustache

The fascination with these creatures with which we are all too familiar, continued despite the war. Company Sergeant Major Savage gained his BBKA "Experts" award, while in a Stalag and there were a further 26 prisoners of war who gained BBKA "Craftsman" status. Just how this was achieved is not recorded.

By 1945, beekeeping numbers reached a peak which fell dramatically once sugar rationing ended in 1953. In WLBK membership rose from 30 in 1939 to 80 by 1952. It would take a further 55 years before branch membership re-gained that level.

So, why was this?

The "Dig for Victory" scheme led to pasture land, including many wildflower meadows - the source of much nectar for the bees - being ploughed up to grow crops. 6.5 million acres in fact. This disturbance prompted dormant weed seeds to pop up. One particularly invasive weed, Charlock – a member of the brassica family and not dissimilar to oil seed rape - proved particularly troublesome to beekeepers because its nectar caused the honey to crystallise rapidly making extraction difficult.

Bees in the vicinity of recently bombed properties, not unnaturally disturbed by the events, were killed to avoid hampering the rescue efforts.

After the war, there was a dramatic fall in the number of hives in this country. The wildflower meadows were not reinstated. Official government policy encouraging the introduction, often disastrously, of pesticide and herbicides and their indiscriminate spraying together with hedgerow removal and the felling of ancient woodland, all in the pursuit of food production, significantly reduced the forage available to honey bees and other pollinators. This led to a decline which continued to the turn of the century. By 2002, Warwick and Leamington Beekeepers numbered a mere 30 members. However, shortly thereafter there were signs that this decline was beginning to slow. The steady increase in popularity of beekeeping, today, sees Warwick and Leamington's membership reaching 282 which, seeing as honey bees are no longer under threat, is something of a victory for them too.

*Thanks go to David Charles. John Home, Steve Bates for their help in providing information for this article.*

# HINTS AND TIPS

Many thanks to Clive Joyce for these tips:

- When carrying out your weekly inspections in May, June and July keep a close eye out for the signs that may indicate swarming preparations are taking place. Look out for these signs and you will be better prepared:-

1. An increase in the number of drones or drone cells.
2. Play cups (vertical, empty hemispherical wax cups) suggest the colony is practicing the art of making queen cells.
3. During swarm preparation the young bees stay in the centre of the frame and the older bees collect around the outer parts.
4. The number of bees around the queen increases as she is fed more. This leads to increased egg laying and eventually the space is not available so possibility of swarming increases.
5. Scout bees will be out about 14 days before a swarm. They will be looking for a favourable site for the swarm to go to. Look out for bees with no pollen doing a waggle dance on the comb, these will be the scout bees communicating their findings.
6. Set up a bait hive and look for interest being taken.
7. Look out for bees zig- zagging across the comb. This recruits bees and stirs up the colony to prepare for swarming.

..... BUT after all this, if they still swarm then collect them up and rub carbolic soap on the area they chose to swarm to. Then they will not all abscond back to that place as soon as your back is turned!

Many thanks to Mike Townsend for this brilliant tip to help find the queen:

There had been difficulty in finding the queen and I was having the problem too as it was rammed full of bees. I decided to add a second brood box and moved almost all the brood into the top one after shaking the bees off. Then put excluder below, above the remaining couple of frames with brood in the lower box. On the next inspection most of the bees had moved up so the queen was easy to find in the bottom box.

Thanks to Clive and Terry Dillon for their advice on this one:

If you have a strong colony, it is possible to use the extra sealed queen cells to make up a second or even third nuc. Just make sure there is only one sealed queen cell on the chosen frame, put in plenty of stores, 2 frames would be good and shake a couple of frames of bees in. It is best to have a mixture of older and new bees so some should be taken from the brood box and from the supers. Fill the space with undrawn wax, there is no need to put a grass plug in the entrance.

A colony with 6 seams of bees is considered viable. Just have this in mind as you are removing bees.

Now it is your chance! If you have any hints or tips that you would like to share, please send them to **h.essex211@gmail.com**

**Helen Essex**

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