

# BETALK

Warwick and Leamington Branch of Warwickshire Beekeepers

## **DID YOUR BEES SURVIVE WINTER?**

t is amazing how our bees get under our skin. Winter losses, or losses at any time of year, for that matter, can be very distressing and those who have suffered this blow feel a real sense of bereavement and guilt. Was it their fault? What did they do wrong? What if the same thing happens again? The romantic idea of beekeeping that you put bees in a box in spring, harvest honey in the autumn, and let them do their own thing over winter doesn't quite equate with the day-to-day realities of beekeeping. In fact, it probably never did.

Worldwide commerce and travel has opened nations to a panoply of perils, as the coronavirus has demonstrated. For our bees a host of ailments from all over the world soon followed including Tracheal mites, various

brood diseases, varroa mites, viral disease, small hive beetles, nosema strains and Asian hornets, just to name a few. Consequently, our hobby can be tiring and frustrating, but people have differing levels of patience for such problems.

You ask, "have I mismanaged my bees?" Well, in true beekeeper fashion the answer is "that depends". Certainly, another beekeeper with more experience might have better results, but no one knows all the variables your individual apiary is facing. Perhaps other beekeepers in your area are letting their mites go untreated, perhaps you have neighbours who have weakened your colonies with pesticides, perhaps the forage in your area is low quality. Perhaps the critters who wreak so much harm to our girls are becoming resistant to the treatments we use. Perhaps the plethora of mites and viruses and their treatments are weakening the general health of the nation's bees? Such issues may be less than obvious even to experienced beekeepers, let alone a new beekeeper who is trying to get their bees through winter.



No one knows the answers to all the questions, and no one knows all the consequences of the cocktail of multiple problems. That is the challenge of beekeeping ..... but it is one which can be met successfully and when it does, it brings such intense pleasure and sense of achievement.

So, don't be despondent. You will have learned so much as a result. Pick yourself up and have another go. But don't struggle on your own. Talk to your mentor or other member beekeepers for advice. I did when I started and still do. You will find them very willing to help. Lack of interaction at members' meetings, of helping out at our public displays and of attending training workshops may have made it difficult to know who to consult, but don't let that stop you. If you contact messagerbee@outlook.com we will refer your query on to someone who will contact you to help.

Ivan A Perry

Based on an article by The Apiarist - theapiarist.org

#### **KENILWORTH CASTLE APIARY**

being gifted by Elizabeth 1 in 1563 to her favourite, Robert Dudley, Earl of Leicester, who converted the castle into a lavish palace fit to entertain his queen. Now a ruin, it is still a favourite place for those visiting Kenilworth. A hidden gem, which is less well known, is an apiary within the grounds, which is run by Warwick & Leamington Beekeepers. As the picture shows, the apiary showcases skep beekeeping, in keeping with the methods deployed in the castle's heyday, as well as hosting more modern removable frame hives. The apiary benefits from the lovely setting surrounding the castle, and there are

enilworth Castle was first built in the 1120s, but its claim to fame stems from it

The photo shows the apiary as it is now, with a promise of good things to come; an update will let readers see the changes once the improvements have been made. To date, invasive nettles have been trimmed back, and in the coming

beekeepers alike.



months, plug plants of various wild flower species will be planted around the apiary to add colour and interest to the site. As the days get longer and the weather warmer, this apiary is a perfect place to visit and enjoy bees in an idyllic setting. For more information on visiting the apiary (or helping with its development!) contact Clive Joyce (07792222251) to learn more about it. **Clive Joyce** 

## **BEEKEEPING TASKS - APRIL**

ith a string of sunny days, dare we say that Spring has officially sprung (just don't look at the weather forecast beyond Sunday).

- · Continue to heft or weigh regularly to check your colonies have plenty of stores. They may still run out of carbohydrate and starve.
- Prepare your hive records- look back at last year and decide what your goals are for this year.
- Watch (on warmer days) to see what pollen they bring in. There is plenty of blackthorn, willow, dandelion (the all-you-can-eat buffet of the bee world) about. Pollen means brood rearing.
- Time for a varroas 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.
- When the bees are flying a good deal you can remove the mouseguards (and if you have hard floors, scrape them). Woodpecker guards can come off.
- When the weather is very good (for more then a few days) and do your first inspection. Is the queen laying? Is there pollen and stores? Is there too much pollen choking up the brood? Mark the queen.
- Decide which colonies need a wax change and start planning now, before the supers go on- they are bound to build up fast.
- When you have had at least three rounds of brood and it is warm you can choose to do shook swarms or Bailey frame changes.
- Add a gueen excluder and super when there are six frames of bees (or before) so that you can relieve pressure on the colony. The flow will need space!

Jane Medwell **WLBK Chair** 

#### WLBK'S 92ND AGM

Meeting (AGM) to be held at the Kenilworth Senior Citizens Club with 30 members present.

Jane Medwell, as chair, quickly reviewed the year and thanked all the members leading and supporting the various activity groups in the branch for the work they all have done in promoting beekeeping in Warwick and Leamington (e.g. the shows team, the apiary team, the co-purchasing teams, meetings, talks etc etc). Jane made particular reference to the work done by Mick Smith, Bernard Brown and Mike Townsend in taking forward their initiative on Dalehouse Lane, which is coming to fruition. The new apiary is anticipated to be in place this year. Jane also expressed our thanks to Tanya Weaver who expertly brings together the monthly edition of BeeTalk.

Jane Brown and Val Dillon reviewed the year end accounts which showed the continued healthy management of the branch affairs. The 2023/4 accounts had been signed off by our Independent Examiner David Cox for onward submission to Warwickshire Beekeeper for consolidation with the other branches and submission to the Charity Commissioners.

WLBK - Branch Accounts for the year ended 30th November 2024

|  | 2023/24 |       | 2022/23 |
|--|---------|-------|---------|
|  | £k      | Ek    | £k      |
| Receipts                               |         |       |         |
| Subs collected for BBKA / WBA/BDI      | 6.79    |       | 7.33    |
| Less subs paid to BBKA / WBA /BDI      | -6.68   | 0.11  | -7.43   |
| Branch Subscriptions                   |         | 3.27  | 3.49    |
| Gift Aid, donations and grants         |         | 1.99  | 3.24    |
| Course fees                            |         | 2.04  | 3.99    |
| Public events                          |         | 1.02  | 1.50    |
| Income from the co-op                  | 24.69   |       | 23.67   |
| Less cost of goods bought by the co-op | -25.63  | -0.94 | -22.72  |
| Miscellaneous                          |         | 0.92  | 2.5     |
| Total Receipts                         |         | 8.41  | 15.57   |
|  |         |       |         |

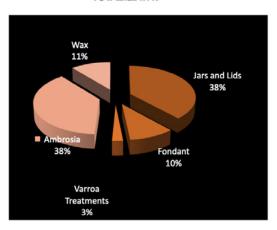
One service that is hidden in the above figures is the current co-purchasing arrangements, which procured some £25,630 beekeeping consumables for members on a "not for profit basis" [this is an increase of some £10,000 over that procured in 2019]. The breakdown of the value of each commodity provided is shown. Again the 9 tonne of ambrosia proved the most labour intensive.

The co-purchasing team led by Clive Joyce were thanked by Jane on behalf of all members for what is a significant management task (finance, ordering, stock control, distribution, etc) and the time commitment and physical effort is considerable.

The good news for the members is that the branch and county annual subscription will be unchanged but the meeting was made

#### WLBK CO-OP INCOME 2023/24

#### TOTAL£24.7k



aware that the BBKA capitation was to rise by £2 in the coming year for registered members and £1.50 for partner members. Junior members will decrease from £9 to £5.

Looking to the year ahead, Jane set out the budget items in which we plan to run a deficit budget. We, like the other branches, are holding reserves and the total reserves of the WBKA charity are a cause for concern. Our current reserves are in excess of £30,000 and they have been at this level for a number of years.

A feature of the AGM is the presentation of the Foden Award. This award was introduced to recognise and encourage new beekeepers to involve themselves in the running of the branch. This year it was unanimously agreed that Francesca Bellingeri should be the recipient. Francesca throughout the season had been an active supporter of the apiary team as well as being involved in many other branch activities.

Note was also made of the winner of the £25 voucher for those completing the membership survey (Neil Shuttleworth).

The AGM agreed the makeup of the committee for 2025/6 which reflected Nicky Maritz standing down from the committee and Richard Pierce joining in November. Jane expressed her thanks to Nicky for her committee work and noted that she would continue supporting the KHN apiary team. [Bernard Brown and Chris Cox continue as the two nominated WBKA charity trustees.]

The committee had proposed that Jane Brown be added to the roll of Honorary Members. Jane, as county treasurer and advisor to our branch treasurer, Val Dillon, has been an invaluable support of beekeeping in Warwick and Leamington and the award was our recognition of this. Her expertise in overseeing our and the county financial arrangements were in danger of being taken for granted.

This recognition is the least we can do to make sure Jane knows we do not do so. The meeting agreed.

Thursday 19<sup>th</sup> February 2026 is when we plan to hold the 93<sup>rd</sup> AGM.

The minutes of the 92<sup>nd</sup> AGM will be posted on the branch website following the next committee meeting.

Chris Cox, WLBK secretary



#### **NEW WLBK LOGO**

e need a new logo for our banners, letterhead, website etc.
It needs to reflect our status as a branch of Warwickshire
Beekeepers Association.
There are some features it must have:

It needs to be scalable (big for banners, small for slides,

letterheads and T shirts).

- It needs to incorporate Warwick and Leamington Branch and Warwickshire Beekeepers Association text.
- It needs to be memorable.

There are also things we can't have- it can't have photographic material, copyright material or anything belonging to another organisations.

We are asking members to send in their ideas to the secretary

#### (secretary@warleambees.org.uk).

We can get some of them professionally drawn and circulated for your views. You get to choose- but we need some ideas. Here are some examples from other Warwickshire Branches:





Sutton Coldfield has it in many forms- this one is embroidered. Solihull and Nuneaton just use the Warwickshire Beekeepers Association logo.

Please send in your thoughts and designs- we'll update you in a future issue of BeeTalk.

Chris Cox, WLBK secretary

## **FANCY A NEW ROLE?**

LBK needs to appoint a **Yellow-legged Hornet Action Team Co-ordinator** to plan for a possible incursion of the Yellow-legged Hornet.

This involves adopting the guidance provided by the NBU/BBKA which, for a low risk area such as Warwickshire, is to promote public awareness and to extend the current

support from members within the branch. The experience and support from the County YLHAT Co-ordinator and from the other Branches' Co-ordinators as well as from Liz Bates, who currently holds the post but who is stepping aside, is readily available. At this stage, this is essentially an organisational role and once set up will require only a modest amount of input until the YLH arrives.

For more information, please contact Bernard Brown on 07774862749 or **bernardnbrown@outlook.com**.

#### BREAKING NEWS FROM THE CO-OP

Two pieces of great news from the Co-op this

- First, nitrile gloves are back! Clive has secured a fantastic deal and we'll be stocking boxes of 50 gloves (small, medium and large) for just £7.45 a box. These are the long cuffed violet gloves, and with careful washing can be successfully used a few times. We haven't stocked these since the pandemic, so it's good to see them back again.
- Secondly, we're offering a whopping 20% reduction on packs of 72 round 12-ounce honey jars available now at just £44.00. Be quick, when they're gone, they're gone!

#### **EQUIPMENT SALE**

Things are definitely on the move, beekeeping-wise, so 'tis the time to review what equipment you are likely to need for the upcoming season. Why not liberate space in your garage by disposing of that kit never used, perhaps inherited, gifted or mistakenly purchased? We've arranged our sale of surplus kit, cunningly timed to attract this season's crop of new beekeepers, to enable you to do just this and to get some cash for it if you want.

The deadline for entries into the 2025 sale is 13<sup>th</sup> April. Contact messagerbee@outlook.com if you want the invitation email re-sent.

#### WINTER LOSSES SURVEY

Members are reminded to respond to our Survey of Winter Losses. This takes less than a minute to complete but does enable us to compare our experience with that prepared by BBKA. The closing date is 25<sup>th</sup> April.

## **WLBK MEMBERS' MEETINGS**

or our March meeting, Tim
Vivian – Birmingham's
rooftop beekeeper – gave us
a fascinating insight into how
he came to keep bees on the
rooftops of Birmingham City
Centre, with tips on avoiding unsuitable roofs
and herring gulls, what needs to be agreed with
building owners/managers, transporting hives
through buildings (put the hive in a duvet cover
and have a trolly) and selling local city honey.

Tim started rooftop beekeeping at The Custard Factory, which no longer produces custard but has been divided into units occupied by a range of different businesses, including Tim's employer. How Tim manages to fit in work with four roof top apiaries and his original one in Hanbury Hall, a National Trust Property, remained a mystery! Lunchtime inspections may be part of it and having a cupboard for his bee kit at each site must help but retired bee keepers often remark that they do not know how they fit work in!

Surprisingly, central Birmingham has plentiful forage, particularly buddleia and rose bay willow herb which colonise land awaiting development. Tim quipped he was perhaps the only person so far to have benefitted from HS2 – his bees at BMU, by Millennium Point can feast on the land being readied for the new station. The canals provide ample water as do rooftop puddles. Whilst traffic pollutes Birmingham's streets higher up the air is much cleaner, and building updraughts give bees almost effortless access to their rooftop hives.

Tim extracts and markets honey from each apiary separately – he has a honey room in an outbuilding at Hanbury Hall. He named his honey

Yellow hives for Custard Factory Bees



business Bee9, after the Custard Factory's postcode and uses its logo, designed by graphic arts students at BMU for all his honeys. As well as selling through shops, Tim sells his honey at each apiary through the building reception. For Tim, beekeeping has become a 'monster hobby'.

April Meeting: Thursday 17<sup>th</sup> April, 7.30-9.30pm Kenilworth Senior Citizen's Club, Abbey End, Kenilworth, CV8 1QJ

#### Stephen Fleming, co-editor of Bee Craft will talk about Drone Congregation Areas

DCAs are the places drone hang out in in the hope of a chance of posterity – mating a queen and dying happy! Where are DCAs? How can we find them? And more importantly how do virgin queens and drones know where they are?

Come along and find out – as ever there will be cake!

Judith Mason, WLBK Meetings Secretary meetings@Warleambees.org.uk



#### **SOCIAL PROGRAMME 2025**

 ollowing responses to the club survey, I am planning a social programme over the summer season when there are no monthly meetings.

- There will be at least 3 bee safaris these will be advertised on the web and via the bee messenger members will need to book.
- A weekday evening visit in early July to the lavender field at Warwickshire Lavender Farm. The farm is owned and run by one of our members, Ian Jamie, who spoke at our January 2025 meeting. The visit will be advertised on the website, free, but places will need to be booked. There will be a collection for Ian's charities.
- Pub evenings at local pubs. Turn up to the selected pub on the

date given for friendly and informal evening. If you have a favourite watering hole – preferably with a garden, let Judith know via email below. We hope to include venues across our patch. Current suggestions are The Red Lion at Hunningham and one of the many pubs in Long Itchington – which is best? These pub evenings will be shown on the club calendar on the web.

• A 'bring and share' picnic or BBQ at KSCC 4-7 pm on a Saturday in August (date to be fixed).

More details and dates for your diary in May Bee Talk. Please let me have your suggestions for pubs:

meetings@warleambees.co.uk
Judith Masson, Meetings Secretary

## GOOD BEEKEEPERS PRACTICE GOOD HYGIENE



orking with clean tools and gloves makes beekeeping more pleasant for the beekeeper and improved hygiene is better for the bees.

Leather gloves are an absolute no no

and should not continue to be offered as a 'giveaway' when buying a beesuit. They are impossible to clean to

'giveaway' when buying a beesuit. They are impossible to clean to a satisfactory hygiene standard for the bees and eventually coated with propolis are sticky, stiff and uncomfortable to wear.

Reusable household gloves have a reasonable level of 'feel' and can be washed at around 60 degrees so a few pairs with clean ones having time to dry off on the washing line are fine. They can also be cleaned using a nylon pad dipped in your wash bucket.

Thinner disposable gloves illustrated have been popular because they provide an even better 'feel' and I am pleased to tell you these are available again from the co-op - visit the website. These have the advantage of long cuffs and can be washed a few times so from an environmental point of view are a better choice than the single use ones commonly available. The long cuffs accommodate the bee suit making them secure but do not assume we can therefore tolerate aggressive bees.

A honey bucket with a well fitting lid to avoid leakage when driving around is also available from our co-op purchasing scheme. This will accommodate hive tools, queen marking cages, queen clips and uncapping forks. All stored in the bucket with a solution of washing soda and a scouring pad means that left in the bucket between uses they come out spotless making them pleasant to handle and clean

for the bees. I also carry a roll of recycled paper towel for drying up as frequently used traditional towelling will carry over potentially harmful bacteria.

European Foul brood continues to be widespread locally and it has been concerning to read that American Foul Brood is around too. Good hygiene practice protects us all from infections in the hive.

Mike Townsend



#### **2025 MEMBERSHIP SURVEY**

his is the third membership survey to help the committee decide how we address members' wishes. One survey was before "lock down", one during "lock down" and now this one under normal circumstances.

The first thing is to thank all who took part for finding the time to complete the survey. At each survey approximately 50% of the membership responded and the inducement of a £25 voucher this year maintained that level of response. (The drawn winner is Neil Shuttleworth.)

Overall, the membership was very complimentary of the committee and the activity support groups for the way the branch is run and the facilities offered to encourage, educate and support the craft of beekeeping in our area.

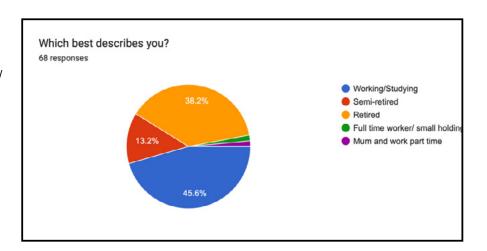
This year we attempted to understand who our members are and what was the nature of the beekeeping by asking questions on lifestyle and overwintering hives. From this we, the committee, now better understand who we are supporting. We now know that the makeup of our membership is predominantly hobby beekeepers who have busy diaries with employment, education or other full-time activities/lives. This goes a long way to explaining the low level of membership involvement at events and meetings etc. One thing for sure is that the membership is definitely not a cohort of the retired.

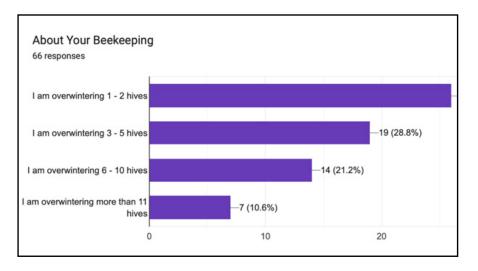
The fact that 70% of the membership are overwintering 5 or less hives is also significant when planning the bulk support activities like honey extraction and frame cleaning. The need for additional stock holding facilities to support co-purchasing being one of the considerations to be addressed in 2025.

As in the previous surveys the most valued offering from the branch is the co-purchasing scheme (the on-line shop). 96% of the returns indicated members planned to use this facility in the coming year. When we consider that last year's turnover of some £25,000 in supplying fondant, ambrosia, glassware, frames etc maintaining support of this facility will be key.

The other Hurst Farm based facilities are also of significant value to the membership where half of the responses showed members looking to use these facilities in 2025.

Although the answer to the branch activities question was relatively disappointing this is explained in part by the membership makeup. A number of members indicated they would like meetings in both Warwick and Leamington, rather than activities being based solely around Kenilworth. (Note: Meetings were moved away from Kings Hill Nurseries in 2024 as a result of the increased room hire rates. After trying to find an alternative venue in the area available on the regular club night to no avail we settled on Kenilworth Senior





Citizens Club and have booked it for meetings, social events and some training.) As many members suggested regular social events — pub evenings etc the plan is to introduce these in the summer on an informal basis, preferably in pubs with gardens. If you have any suggestions on a suitable hostelry that fit the bill, please let Judith Masson (meetings@warleambees.org.uk) or Chris Cox (secretary@warleambees.org.uk) know.

As part of the survey members were asked if they were able to help under several activity headings. It is planned that those who have offered to help be contacted in the next couple of weeks.

The education team will also look at the training return to see what we (and the county) can do to address the suggested topics. The role of the Apiary and the reinstatement of the Dalehouse Lane Apiary site may allow us to develop more advanced practical training to meet existing members expectations.

It was also clear from the returned comments that much of what we do, and what equipment is available to the members, is unclear. It is planned that changed arrangements will address this by giving more visibility via our website diary and through BeeTalk.

Finally, the report of BeeBase registration is at some 95%. This is in line with the number of active beekeepers who completed the survey.

Once again, thank you to all who completed the survey. Chris Cox, WLBK secretary

#### **YLH - THE LATEST BUZZ**

second Yellow Legged
Hornet has been spotted.
Joining that spotted in
Oswestry, Shropshire at
the end of January. This
sighting was in Canterbury
on 24<sup>th</sup> March. That at Oswestry was
probably a stowaway but there were nests
destroyed in the Canterbury area in 2023,
the jury is out as to whether the YLH was
related to the 2023 ones. Both YLH's were
killed and sent for DNA analysis.

The Animal and Plant Health Agency has shared some of its analysis of data from last year's efforts to combat the YLH.

- Nests destroyed were concentrated along the coast in 2024 whereas in 2023 they were found inland as well.
- 29,611 sightings were reported in 2024.
   Only 50% were supported with photos.
   Those without were discounted. Of the
   15,000 or so supported sightings 71 were confirmed as being of a YLH. That is 0.2%
- The peaks in the number of sightings coincided with promotional events .e.g /the Chelsea Flower show, rather than with the peaks in YLH numbers.
- The peak time for nest destruction was August and September just at the time of the production of next year's queens.
- There was no discernible preference for any particular species of tree as a nesting site.
- The results of DNA testing of samples of bees and nests showed that 18 queens were responsible for the 24 nests destroyed last year. 5 of the queens had built primary as well as secondary nests, both being included in the 24 destroyed. Recorded for the first time in the UK was what has been termed a "re-build" nest. This is, in effect, a third nest built by the colony and is thought

to have occurred because the eradication of the secondary nest did not kill all the YLH so the survivors set to and built a new one.

- Most of the queens had only mated with one drone and, as a consequence, there were signs of in-breeding.
- Two 2024 nests were found to be related to nests that had been destroyed in 2023 suggesting that a queen escaped the 2023 eradication and successfully overwintered. The queens in the other nests were all new arrivals.

For 2025, spring trapping is planned to start in the South East hot spots – Kent, East Sussex and Southampton – in April. These will be no-kill, monitoring traps and the aim is to have one trap in each of the Ordnance Survey's kilometre grid squares around last year's nest sites. Although we are in a low risk area, current



thinking is that we should carry out limited monitoring adjacent to transport hubs such as airports, rail hubs, service stations etc – to detect stowaways. We shall also be monitoring to be able to say, with some confidence, that we don't have YLH, not just assume we haven't because we haven't seen any.

Visit this website for government confirmed sightings: <a href="https://www.gov.uk/government/publications/asian-hornet-uk-sightings/asian-hornet-sightings-recorded-since-2016">https://www.gov.uk/government/publications/asian-hornet-uk-sightings/asian-hornet-sightings-recorded-since-2016</a>

Bernard Brown
County AHAT co-ordinator



## IT'S NEARLY SHOW TIME - WLBK SHOWS 2025



rganisations and events including the Kenilworth Show have already made enquiries, so the branch displays committee is working hard on a programme to promote our wonderful craft where you can spend an enjoyable day out in this delightful county of ours and, of course, there is plenty of opportunity for "Bee Talk".

Bringing awareness of bees and beekeeping to the general public is part of our charitable remit and we have the kit to mount a wide range of different activities for which we rely on you, our members, to volunteer to help man the WLBK displays.

Helping on our stand involves sharing our knowledge and enthusiasm with the public, making sales of honey and wax products, interactive activities for the children on the 'Little Buzzers' stand, demonstrating various pieces of beekeeping equipment and answering queries. All of these activities are well within the capabilities of anyone who has been on our introductory to beekeeping course. We arrange the help in shifts and volunteering for a couple of hours on our stand usually entitles you to free admission to the show so there is time to sample the wider delights of the event.

We seek volunteers a few weeks before a particular event and

publicise this, together with the arrangements for registering your interest, in Bee Talk and by email. So, if this prospect appeals to you, please note the dates of the events listed below in your diary and there are more events in the pipeline. A full list of these events is also included in the Branch Diary section of our website.

#### **Events:**

04/05/25 Guys Cliffe 17/05/25 Stoneleigh Orchard 17-18/05/25 Guys Cliffe Walled Gardens 31/05/25 Kenilworth Show 08/06/25 Open Farm 25-27/06/25 Kenilworth Castle Children's Event 05/07/25 Shotteswell Fete 02/08/25 Lowsonford & Rowington Village Show 02/08/25 **Dassett Country Show** 06/09/25 Community Live in Leek Wootton 11-12/10/25 Hill Close Gardens Apple Day

Chris Price
Shows Committee

## **SWARM COLLECTORS**



(https://warleambees.org.uk/swarm-collectors/) then email your interest to me and I'll run another introduction zoom, you can then decide if it's for you. On the call we would cover:

- Why we collect swarms
- How to find a swarm collector
- Equipment needed for swarm collection
- Steps for successfully collecting a swarm
- And what to do with it afterwards
- Examples of different situations

As important as having collectors is to have people who want swarms. Some collectors will be doing it to replenish their own stocks but others will want to pass

them on. As a branch we prioritise those who have no bees but all are welcome to register on the Swarms Wanted list (https://warleambees.org.uk/swarms-wanted/).

Rich Pierce swarms@warleambees.org.uk



swarm collector in May is worth a load of hay, A swarm collector in June is worth a silver spoon, But a swarm collector in July is not worth a fly

OK OK it's a swarm.

If you fancy joining our team of 39 collectors but are unsure of the process, do's and don'ts, what you need and are therefore holding off on registering as a Collector

## **WEBSITE UPDATE**

eep an eye on
Upcoming Events on
our Homepage so you
don't miss Meetings,
Bee Safaris, Education,
Shows and soon
to be launched social get togethers.
Better still go to the Events page and
subscribe to the calendar with your
preference and ensure you see it in your
own Calendar. Lots of new events will
be loaded soon...don't miss them.
Just a reminder that in the Members
Area you can see a list of items

"For Sale and Wanted" (https://

warleambees.org.uk/beekeeping-

Subscribe to calendar >

Google Calendar

iCalendar

Outlook 365

Outlook Live

Export .ics file

Export Outlook .ics file

**equipment-for-sale-and-wanted/**) by other members and get your own loaded.

Also in the Members Area you can find the latest list of "Available Apiaries" (https://warleambees.org.uk/warwick-and-leamington-beekeepers-available-apiaries/).

Please note that at some point after this April BeeTalk comes out we will update the password for the Members Area. You will be alerted by email from MessengerBee. If you find the old password not working and you've not seen an email please check your Spam/Junk folder.

Rich Pierce

web@warleambees.org.uk

#### **AI VERSUS THE HONEY BEE**

I promises a great deal. Some hope that it will help us live better, more fulfilled lives that provide greater opportunity for free time. Some see that Al can replace doctors and solicitors or even run companies and countries better than people.

However, before we get too carried away, let's test it against something that should be a lot less complex than human

know-how and organisations. Let's test Al's capability in a complex, real life situation. Let's test it against the humble honeybee.

Can AI emulate the decision making and behaviour of the humble honeybee to ensure the survival of the colony generation after generation? In other words, can AI create a virtual colony that ebbs and flows during the different seasons, produces sufficient stores, survives and reproduces itself through swarming?

Emulating the behaviour of the humble bee at the individual level means that the developer of an AI system cannot use an algorithm that applies at a colony level, for instance 'When drones fall below 15% of colony, produce more drone cells'. The challenge is to have the collective sum of the individual bee activities add up to efficient honey production and the survival of the colony.

Scientists and bee keepers can agree that bees are amazing but if we are talking about intelligence, artificial or the real thing, surely that means the application of some sort of logic and the making of a decision to do something. With their 'tiny' brain, many would argue, the individual bee must simply be on automatic - somehow programmed - to respond to a complex set of visual, vibrational and hormonal signals.

If that is the case, then the job for AI is simple. Identify these cues and programme the behaviour accordingly.

To help scale the challenge, let's look at some of the abilities of bees and divisions of labour that there are in the colony.

The humble honey worker bee emerges from its wax cell at twenty-one days and after a little time cleaning themselves up, being fed by other bees and orientating themselves, they put themselves to work. There is plenty to do in the hive including cleaning, feeding larvae, manipulating wax, processing honey, guard duties and tending the queen. These tasks can be done at any time dictated by the needs of the colony.

As more new bees emerge in the hive it is time for the 'nurse' worker bees to go foraging. Whilst some seek nectar - others seek pollen.

Scientists have already addressed the questions - are bees smart? Do they have a memory? Can they solve problems and be trained to understand concepts such as 'different' or 'same'.

The short answer to these questions is 'Yes'. For its size, the honey bee, in fact, has a large brain and many scientific experiments have proven that they can be taught to remember, recognise, discriminate and learn.

If these divisions of labour are not truly amazing, then consider that the flying bee develops a 'mental' map of their environment that takes into account the landscape in a three-mile radius. It uses this knowledge to go to the source of food that is most abundant with a little instruction from the dance of other bees. And remember, the famous bee waggle dance takes place in the dark!

This division of labour and efficiency surely has some element of individual choice in it?

A beekeeper only needs to have two hives to see how differently bees behave. And when it comes to swarming, the differences cannot be more acute. Surely there can be no other conclusion than bees choose when to swarm. Yes, of course, there are a huge range of biological cues that help in the timing of this but two colonies next to each other will show very different behaviours and indeed, within the colony only some of the bees set themselves to start queen cells. When it comes to actually following the queen as a swarm, roughly half the colony will choose to stay at home.

In the whole life of the colony and its annual cycle of growth and decline, there are many other examples of the choices that bees make, such as moving to a new home after swarming.

In fact, in studying the behaviour of bees, it's easy to come to the conclusion that each hive has its own 'personality' and there is a 'super-mind' in operation.

But are we guilty here of being anthropomorphic, meaning we are giving them human qualities when talking about choosing to do this or that or have a mind? Clearly bees choose to do this or that. It is not a choice that they can verbalise but it is a choice that they making in any case.

Scientists have had outstanding success in understanding, making predictions and garnering the benefits of the physical world. In the physical world, there are actions and reactions, stimuli and responses, one thing causes another thing to happen. However, in the social realm, the realm where bees operate, nothing is as simple as that. No organism simply responds to a stimulus. All creatures, including bees and humans, respond to how we interpret the stimulus and this in turn is a function of intentions or the goals that we have

Goals! Intentions! Bees! Postulating such attributes may well prompt a collective sigh of disdain. But bear with us.

We are all, from amoeba to human being, goal-oriented and are continually asking, 'If I do this, then this will happen, or will it?' This is always the question whether or not we can verbalise it? The question is sometimes easy to answer, sometimes difficult to answer without investigation and sometimes it is impossible to work out at all.

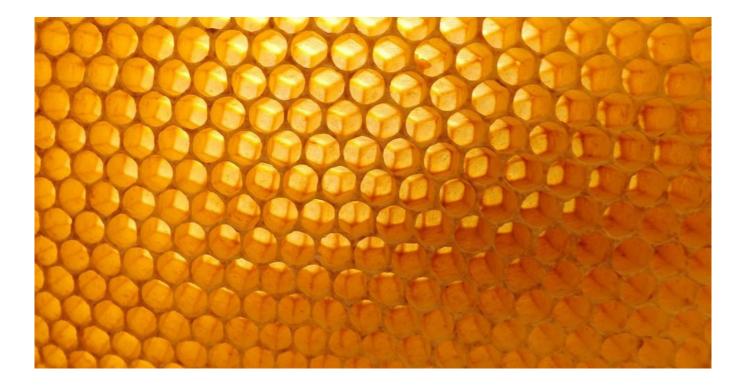
Within the confines of their genetic boundary and physical limitations, bees are free to choose. Nothing ever quite repeats. There is randomness in the world and without exercising free choice bees wouldn't be able to cope with the gap in knowledge that life throws at them. What is true for bees is true for all creatures. A bird may be programmed to build a nest but where and with what exactly, well that is up to the bird itself.

A colony of bees operates as complex adaptive system. Intention guides the choices bees make and enables them to operate one step ahead of learnt behaviours and their evolutionary specified responses, and, in anticipating the future, they beat the world to the punch. This gives the ability to adapt to different situations in an efficient way.

An AI system that truly emulates bee behaviour looks like it must have some sort of intentionality built in. In addition, it has to provide opportunities for the 'virtual' bees to make individual choices or, in other words, encompass freewill. Will AI ever be able to meet such a challenge?

An edited version of an article by Russell Connor, of Thornes and replicated with their permission.

#### **HINTS AND TIPS**



- Do you have a problem with excessive pollen being stored in supers? Well, this season try putting drone foundation in the super directly above the brood box. The bees may be more reluctant to put pollen in and so more honey will be stored. Well, that is the theory but I think it is worth a try!
- 11 to 18 days after emerging, the worker bees are busy making wax and building comb. The wax needs to be warmed before it can be moulded. So once the colony is expanding it is a good idea to move the outer undrawn combs towards the warmer centre so encouraging the workers to draw these out too.
- Make hygiene a priority this year! Always take a bag or box with you during an inspection to put those odd bits of comb, lumps of wax and propolis in. This will also reduce the olfactory signal to any of those pesky unwanted non-native species!
- We have had a very windy Autumn and Winter. To avoid hives being affected it is a good idea to put a sturdy piece of wire under the paving slab you are going to put your hive on and shape a loop on each end. The strap can be threaded through these loops and secured on top of the hive.

Now it is your chance! If you have any hints or tips that you would like to share, please send them to <a href="https://hintson.org/hintson.org/">h.essex211@gmail.com</a>





The editor of Bee Talk is Tanya Weaver.
Please send content for the newsletter to her by the 28<sup>th</sup> of each month:

WARWICK AND LEAMINGTON BRANCH OF WARWICKSHIRE BEEKEEPERS ASSOCIATION REG CHARITY NO. 197656

WWW.WARLEAMBEES.ORG.UH