Wisborough Green Beekeepers Association Newsletter – February 2024

Website: www.wgbka.org.uk

Facebook Group: http://www.facebook.com/groups/wgbka
Library, Shop and WhatsApp group – see end of newsletter

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Contributions for the March newsletter should be received by Friday 23 February.

From the Editor

Summer is coming, and the meeting dates are on the website, so put them in the diary now! Before the season gets going, however, you should find time to read Martin's fascinating article explaining the science behind crystallisation in honey, and to Bee Puzzled by Martina's crossword, as well as to check on both bees and kit as advised by Roger.

newsletter@wgbka.org.uk

Please keep the member contributions coming, but do get them to me by the last Friday of each month.

Tamsin



Dates for your diary

Winter Meetings

Wednesday 14 February

Wednesday 28 February

Meetings will take place at the Chapel, Spy Lane, Loxwood; details will be sent by email nearer the time.

NEW: Summer Meetings

Please see the list of dates on the website http://www.wgbka.org.uk/Events Diary.html

BBKA Asian Hornet Conference

Saturday 17th February

Please see https://www.bbka.org.uk/asian-hornet-events.

West Sussex BKA Annual Convention

Saturday 24th February, Lodge Hill, Pulborough

Please see the final reminder below; the booking form was sent with last month's newsletter.

BBKA Spring Convention – 150 Years of the BBKA

Friday 12th – **Sunday 14**th **April,** Harper Adams University, Shropshire, TF10 8NB. www.bbka.org.uk/pages/category/about-spring-convention.

West Sussex Beekeepers' Bee Market & Auction

Saturday 27th **April** from 8:30am at Brinsbury Campus, Pulborough, RH20 1DL. www.westsussexbeekeepers.org.uk/auction.html

Jars on offer

Hobbycraft has a special offer on glass jars of different sizes at present: "buy one pack of 12, get 2nd pack half price", with free delivery if you spend £25. Thanks to member Teresa for sharing this: she says that she has had jars from them before and they have been good.

Basic Study Group - Reminder

We are occasionally asked about the BBKA exams, the "basic" assessment in particular. The "basic" syllabus has many topics that are relevant to all beekeepers, whether they wish to take the assessment or not, so well worth learning. I am putting together a study group of people interested to go through the BBKA basic syllabus. It will be over a few evenings/afternoons, depending on what suits everyone. This is to help and encourage members to learn more about their bees, only taking the assessment if they wish to.



Image by pch.vector on Freepik

Please contact Martina as soon as possible if you are interested, then we can agree suitable dates and place.

Beekeeping

Queens will be increasing laying now, so February and March are **danger times for possible starvation**. Please don't feed, just because you are told to, as that may cause problems by crowding queens out. On a warm day when bees are flying, just quickly remove the crown board, smoke the bees gently and have a look between the frames for sealed stores. If there are several seams, the colony should be OK for 3-4 weeks. If you are in doubt, then remove a few outer frames. If there is plenty of sealed stores, they will be OK. Only feed bees if they need it.

At the time of writing (31 Jan), the withy (pussy or goat willow) is beginning to swell the buds. They are dioecious (male and female trees), female producing nectar, male pollen. In a warm spell, they, along with other spring plants such as dandelions, can progress rapidly, producing quite large quantities of nectar and pollen.

On a dry day, **get your kit cleaned and mended**, so you are ready for spring cleaning without panicking.

I am writing this after speaking to members about *Swarming and What Swarm Prevention* and *Control Methods are Trying to Achieve*. It's important that beekeepers understand **what happens in a colony when it is preparing to swarm**, otherwise the loss of a swarm is likely. If you didn't attend the meeting, then check out some of my videos.

On the subject of videos, the **presentations at the 2023 National Honey Show** are beginning to come online. One that seems to have attracted favourable comment is called *200 years of experience in 1 hour* Here. This is a general discussion between Andrew Abrahams, Mike Palmer, Randy Oliver and myself, three of whom have kept bees in excess of 50 years, with a total of 216 years experience.

WSBKA Annual Convention – Saturday 24th February 2024

Lodge Hill Centre, Watersfield, Near Pulborough,
West Sussex RH20 1LZ

Final Reminder for our Annual Convention!

This is your final reminder to book a place at the West Sussex Beekeepers' Annual Convention

Reception open from 9.00am. Introduction and Welcome at 9.30am

This is your final reminder to book a place at our Annual Convention, which has again attracted exceptional speakers to cover a wide range of topics with the main lectures being presented by Margaret Murdin, Professor Lars Chittka and Lynne Ingram. There is something for everyone, beginner to expert.

Main lectures:

Margaret Murdin – The Queen

Professor Lars Chittka – The Mind of the Bee

Lynne Ingram – Know your Enemy

Apart from the three main lectures, you can choose to attend two out of the six seminars and in between times it is a great opportunity to catch up with beekeeping friends throughout the County and beyond.

4 February 2024

Patterson in Print

I would like to start by **thanking members** who have enquired about my progress and those who have helped in a variety of ways when I needed help. It is much appreciated. I hope that by the start of the active season I will be able to do the lifting that beekeeping requires during the active season.

I still seem to be busy, with three weekends running taking me to the Isle of Man, Yorkshire, Staffordshire, Suffolk and Northampton. I may expand on them next month. I am not keen driving in the dark at the moment, so more time is taken up than I would like, but better being safe.

You may have heard that owing to the definition of the words "hobby" and "hobbyist", it may have been uncertain the **BBKA Third Party, Public and Product Liability insurance** covered those who sell hive products. Action by West Sussex BKA, of which Wisborough Green is a division, has made it certain that all members with 39 colonies or less are covered.

Don't forget the **auction on Sat 27th April**, where you can either sell unwanted items or buy what you need. This is always a good day out in the company of other beekeepers, so worth a visit, even if you don't buy or sell anything. Helpers are needed on the day, so please volunteer to Martina.

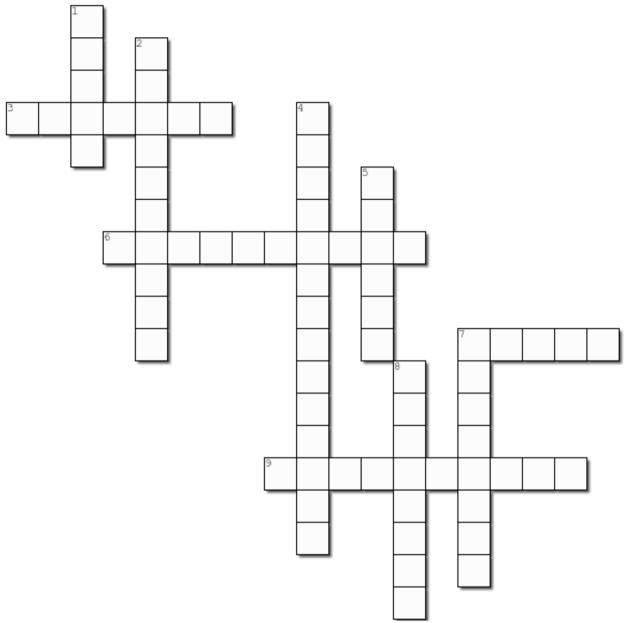


When staying at a farm B&B near Stoke-on-Trent for a couple of nights, the host asked me what I had been doing, so I told her I was speaking at a beekeeping event. She said her father was a beekeeper, then produced his "Junior Beekeeping" certificate awarded to him as a 14 year old in 1935. At that time, there were two brothers, called Herrod-Hempsall, who were very dominant in beekeeping, one examining her father, the other was BBKA Secretary. She said she still had one of her father's hives, which she photographed for me. This is the **old style WBC**, that were redesigned into the telescopic type we know today. They had straight sides and plinths to located them correctly and allow rain to drain off. There were many of these when I started beekeeping, but I see very few now, not even

in the auction. There were no standards at that time, so different manufacturers had different sizes, presumably so spare parts could only be bought from them.

Roger

Bee Puzzled



Created using the Crossword Maker on TheTeachersCorner.net

Across

6

- 3. A house for bees.
- 6. A sheet of wax with embossed hexagons
- 7. A life stage of the honey bee
- 9. A hive accessory used to collect pollen.

Down

- 1. Longest living bee in the colony
- 2. A treatment used mainly in December
- 4. Galleria mellonella
- **5.** Plant cultivated as a fodder. The flowers attract bees and bumblebees. People search four leafed ones for good luck.
- 7. A tree, fickle source of excellent honey and a potential bee killer. In Europe associated with fertility
- 8. A sugar-rich sticky liquid, secreted by aphids, collected by honey bees

February 2024

Crystallisation

I was reading Roger's piece about granulating honey and I was transported back to Herbert Shiner School, Petworth. A science class on salt crystal growing in super-saturated solutions. Here is my attempt to remember some of that lesson which relates to honey (and a bit of research).

Honey is a non Newtonian fluid¹, it is also a super-saturated solution². Honey is mostly glucose and fructose (sugars) with some other bits thrown in.

All honey granulates (crystallises) eventually, in other words throws itself out of solution from a liquid to a solid. In order to do this it needs something for the crystals to grow on, i.e. a substrate. This can be anything from a pollen grain, a bit of bee or a crystal of sugar from the honey itself.

The crystallization process is affected by temperature, the balance of sugars from the nectar, the % of water and how much substrate is in the solution for the crystals to form on. When crystals form they tend to form at the size of the substrate (or seed crystal).

When I was in Paramedic training a fantastic lecturer would at this point say "but you don't need to know that". But it does help you as a beekeeper, and when it comes to storing, setting and selling honey.

A basic explanation:

Nectar is sucrose and the bees add enzymes (invert it) to break it to glucose and fructose and remove water to stop fermentation before they store it. The higher percentage of glucose, the quicker the crystallization, the larger the crystals that form and the harder the honey sets. (granulates).

Knowing this explains why we need to extract oil seed rape (OSR) honey as soon as the crop is more green than yellow. The nectar has a high glucose content, so it will set in the comb and also in the bucket or jar fairly quickly. Ivy nectar also has a high glucose content and will set with a larger crystal, so sets very hard in the comb and in a very long cold winter, the bees may not be able to access water to dissolve it.

Both of these crops are relatively new to UK bees. We have only grown OSR for a few years and ivy, although a native, is much more prevalent as woodland and hedgerows are far less managed than when labour was cheaper. But I digress.

UK summer honey is far more forgiving to the beekeeper as the balance of sugars is more fructose, extraction is more relaxed and can even be stored in the comb for a while if it is kept warm.

I mentioned substrates, which are required for the sugars to form crystals on. When extracting and sieving\filtering your honey the size of the holes in the filter can be a factor in

how quick your honey sets. This is used by some honey producers to remove as much substrate as possible to give runny honey a longer life on the shelf before it granulates in the jar. This can also be achieved by pasteurisation or flash heating.

Returning to the "larger the seed crystal, the harder the set" principle, it therefore follows that the smaller the seed crystal, the softer or smoother and creamier the set. What used to be called creamed honey, now soft set as there is no cream in it, is a skill that is not difficult to learn once you know some of the above. Take some crystallized honey, you only need about half a pound. Put it in a pestle and mortar, grind until you get a smooth feeling on the tongue. Add this to four or five pounds of runny honey and stir, allow the air to come out overnight and then jar up. This is your substrate or seed crystals to make your soft set.

We use warmed, liquefied OSR honey as a basis for our soft set; once cooled we add a couple of jars of seed and stir with a honey creamer. Allow to stand overnight and jar up. I am told that the optimum temperature for setting honey in the jar is 14 degrees. I do find it sets quicker in the winter, some use a chiller cabinet. But it all sets eventually!

I will just mention comb honey, which is generally summer honey as you wouldn't want it granulating on the shelf, unless it is heather honey which is another story ... Oh, OK then, heather honey is described as *thixotropic*: it is gel like which may be caused by certain proteins in the nectar. The result is a much longer crystallization process and it is less likely to ferment.

Notes:

- 1. A non-Newtonian fluid is a fluid that does not follow Newton's law of viscosity, that is, it has variable viscosity dependent on stress. In non-Newtonian fluids, viscosity can change when under force to either more liquid or more solid (*Wikipedia*)
- 2. A supersaturated solution is a solution that contains more than the maximum amount of solute that is capable of being dissolved at a given temperature. The recrystallization of the excess dissolved solute in a supersaturated solution can be initiated by the addition of a tiny crystal of solute, called a seed crystal (*Libre texts*)

Martin Hill

The Teaching Apiary

We are planning to bring the hives from Dounhurst to the Roundstreet Common apiary, so we have **all our bees in the same place**, making it easier to manage. I hope to do this during February, with a bit of help from members. There is also an old ditch running across the site

that needs filling in and levelling. I'm looking to see the spring flowers that have appeared, such as violets, milkmaids and orchids, with centaury to follow.

Scheduled meeting dates are on the website, so please put them in your diary before you forget. As usual, there will be ad hoc meetings, mainly for specialist topics, circulated by email.

Roger

WGBKA Shop

The shop is for members only and open at WGBKA apiary meetings. In an emergency, please contact Martina. You can see the price list at https://sites.google.com/view/wgbka-shop/home.

WGBKA WhatsApp Group

If you would like to be a part of this informal members only group, please contact Martina with your mobile number and she will add you to the chat. It's a great way to compare notes, get advice from others and generally keep in touch with members.

WGBKA Library

The Association has a collection of books for loan to members, covering not only many aspects of beekeeping, but also guides to hive products, honey recipes and memoirs. The full list is here; to borrow any of the books, please email Martina secretary@wgbka.org.uk.