

## BeeZeen – Spring 2020 (the COVID-19 special edition) 🧐

Welcome to Westerham Beekeepers' BeeZeen on the first day of Spring, for a canter around local beekeeping and self-isolation in our area.

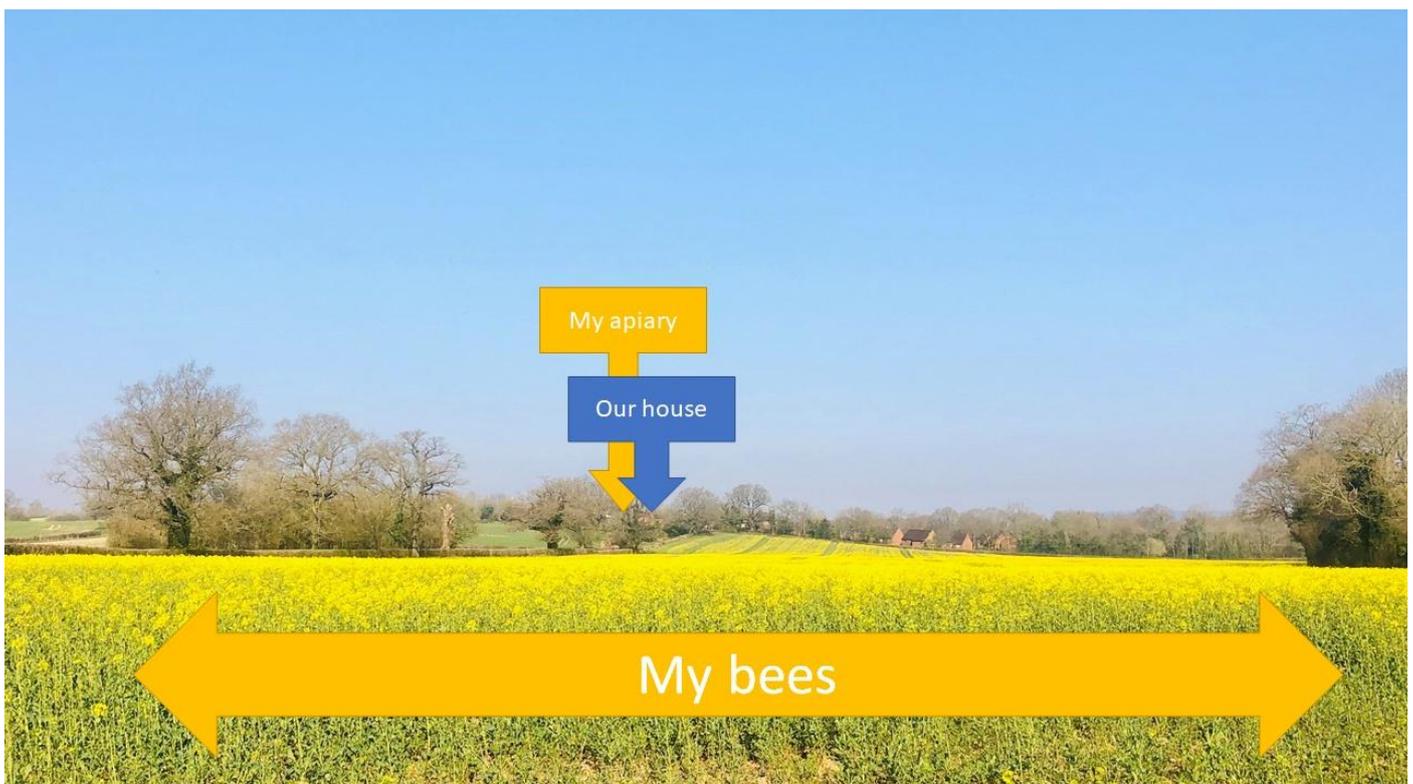
Thank goodness it's stopped raining – the sun has come out and we have time on our hands to play with the bees. 😎

In this edition, we look at:-

- > Dealing with OSR honey
- > Queen marking colours
- > Self-isolating beekeeping jobs
- > Swarm control (*that can't fail*)
- > Natural beekeeping update – varroa resistant stock
- > Beekeeper of the moment (prize winning new feature!)
- > (Live) Hive temperatures
- > Top tips

### Dealing with OSR nectar / honey

We kick off this BeeZeen with a fabulous pic supplied by Mark Waddington (thank you) of a view of a few flowers looking back to his apiary.



Jars of gold ahead! Oil seed rape nectar is available in large volumes and but poses challenges to the beekeeper as it crystallises rapidly due to its higher than average glucose (versus fructose) content. Basically it sets rock-hard in the comb unless extracted quickly.

There are a few techniques to be aware of:-

- 1) Add drawn comb as the first super. Bees don't perceive foundation as more space early in the year
- 2) Get your swarming head in gear and prep! A nuc artificial swarm (see below) would keep the foraging force together
- 3) As OSR honey sets "like a road", you have to extract before all of the cells are sealed. The "shake test" gives a good indication of whether the nectar is ripe. Hold the frame horizontally over the hive and give it a sharp shake. If nectar flies out, it is not ready. If it stays put, the frame can be taken for extraction. Test the final honey with a refractometer



- 4) Clear the bees quickly off the supers – a porter bee escape takes too long. Use a rhombus board (few hours) or shake and brush. Speed is of the essence.
- 5) After taking off the OSR supers, add a new super to provide space, especially for a strong colony
- 6) Extract immediately in a warm room to reduce viscosity of the honey

Good luck – there are a few challenges to this bountiful, early crop. But make the most of it as planting of OSR is down by 1/3 this year in the south-east.

### Thank you Lizzy for following the Queen coding yearly rules

Marking or re-marking your queen is a good job to do at this time of year whilst the colony is relatively small.



This year, the queens at the Training Apiary will be spared their usual drowning in paint by a first-time beekeeper due to the restriction on gatherings. Small mercies.

## Social-distancing

The challenge for most beekeepers is NOT social-distancing. It is NOT glazing over in a social gathering where the topic is momentarily steered away from beekeeping. We are damn fine self-isolators and social distancing is our thing. Our USP. This is our “time to shine”.



What to do whilst stuck at home? A few thoughts

- 1) **Plan the artificial swarm** you are going to use (see below) and get the kit ready
- 2) **Make a queen frame trap** to replace using chemical treatments on varroa (use from July-Aug so you have time). See instructions on our Westerham Beekeepers website.



<http://westerham.kbka.org.uk/wp-content/uploads/2019/11/QFT-instructions.pdf>

- 3) **Clean equipment** you threw into the bee shed last autumn with vague promises to sort it later
- 4) **Leave out a bait hive:** If you can't get to your bees very often or they always seem to swarm when you are looking the other way (*heard 'em all*), why not leave out a Bait Hive? This would collect your swarm for you rather than parking itself down your neighbour's chimney. Seeing scouts at the entrance is also a good indication that your bees are getting “ready for their holidays”.

A brood box or 6 frame nuc will suffice and leave some old comb in there as an attractant. This is best placed some distance (50 metres +) from your apiary as bees like to swarm to new foraging grounds.



## Natural beekeeping update *(Have we found varroa resistant bees?)*

Winters are always a little worrying for beekeepers; perhaps more so when you have a different approach to the mainstream of solving the long running problem of varroa – no chemical treatments.

In the first season, we had 28 colonies involved in the project which has risen to c50 colonies last year. With education and evidence, chemical-free beekeeping will grow in popularity.

We now know of 2 commercial “treatment free” set ups in the south-east (North Downs Bees, Kent & Two Brooks Bees, Surrey). Nucs of hygienic bees sell for £255 at the latter - clearly, they have competitive advantage. In the USA, there are a number of huge TF commercial beekeepers of over 1,000 colonies (check out Sam Comfort at Anarchy Apiaries <http://anarchyapiaries.org/hivetools/node/32> )

There are 4 stages to the Westerham project:-

### Finding varroa tolerant bees (Westerham Bees’ 5 year project)

<u>PHASE 1</u>	BEEKEEPING WITHOUT CHEMICAL MITICIDES
<u>PHASE 2</u>	IDENTIFY BEES THAT COPE WITH VARROA
<u>PHASE 3</u>	BREED FROM BEES THAT CAN COPE WITH VARROA



**SUSTAINABLE TREATMENT FREE BEEKEEPING  
WITHOUT BEEKEEPER INTERVENTION**

Last summer, some of the lead group at Westerham took the plunge and bees were left to fend for themselves (ie; no summer / winter chemical or biotechnical intervention to reduce varroa). Phase 4 had arrived!

This spring we saw the results.....

Across 8 different apiaries, 35 out of 39 colonies (hives and nucs) came through with probably only 2 of those losses attributable to varroa. That’s exciting. Too early to break-out the bunting, but it seems we have a base of varroa resistant breeding stock.

## Swarm control

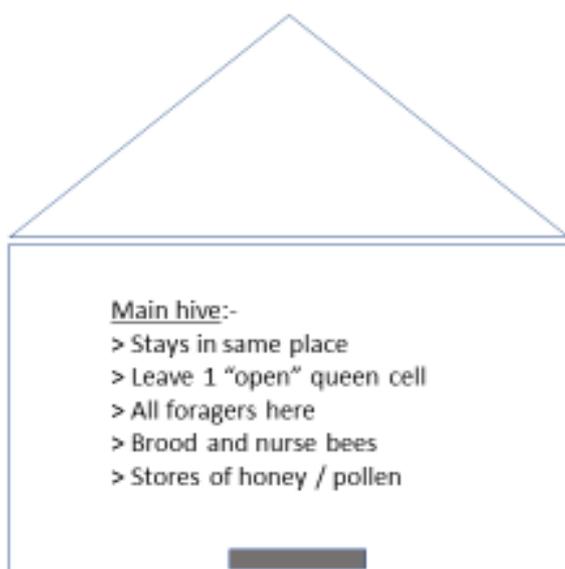
We are going to struggle to demo anything at the Training Apiary in time for the main swarm season, which is typically April-June around here (except at Kim's).

So here is fail-safe artificial swarm method you can do with your eyes closed (*Ed; can't believe he said that*). Only needs a poly nuc and some frames of foundation. No excuses!!

In a natural swarm, the laying queen leaves with the swarm. This technique stops them from swarming because the beekeeper is removing the laying queen to the nuc.

### Nuc Artificial Swarm technique

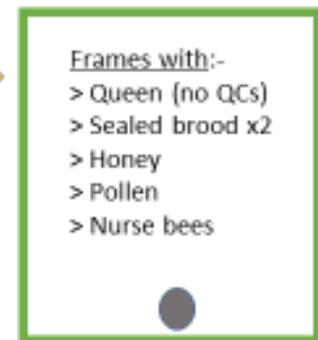
(kit needed: Nuc & 6 frames foundation)



Transfer frames to nuc

#### Steps for nuc

- 1) Put nuc next to hive for frame transfer
- 2) Transfer queen on her frame into nuc
- 3) Transfer 2 other frames of SEALED brood (takes little looking after)
- 4) Transfer frames of nectar/honey /pollen
- 5) Move nuc 2 metres away
- 6) Nuc is now self sufficient (if syrup required, feed after 24 hours to avoid leaving foragers coming back to rob it out)



Foragers fly home

#### Steps in Hive

- 6) Reduce queen cells to 1 "open" one (mark frame)
- 7) Add foundation to replace transferred frames
- 8) In 1 week, check no more queen cells in hive
- 9) Feed syrup if required

## FAQ

Q: Why only leave 1 queen cell?

A: If many virgin queens hatch at the same time, caste swarms can issue where different virgin queens take a small number of bees with them.

Q: Why leave an open queen cell?

A: You know the larvae is alive – in a sealed cell, she might not be

## Beekeeper of the Moment

This is a new feature for the BeeZeen highlighting some of the activities of our members. There's prizes to win!

Honourable mentions go to John Metcalfe and Kim Macleod. John took up beekeeping last year having received his bees in Spring. All 3 of his colonies overwintered well and without any chemical treatments (mentored by our own Keith Masters). Superb achievement.

By the end of March, Kim had already artificially swarmed (nuc version – see above) a colony after finding some developing queen cells:



It's a colony that has form for "going on their holidays" in early April in past years.....Top beekeeping Kim.

But the much coveted "Beekeeper of the Moment" award goes to Topsy, who somehow has been managing her colonies whilst on crutches, whilst singing "Jake the Peg". Top effort! A prize of a queen marking "German plunger" is winging its way to you.



## (Live) Hive temperatures

We have on our Westerham Beekeepers' website a link to live temperature monitors inside a hive. (<http://westerham.kbka.org.uk/fascinating-hive-monitoring-project/>)

From screen shot below, the green line shows the temperature in the brood nest which is now being kept at 35°C, 24 hours a day. This is despite the ambient temperature (light blue line) getting down to almost freezing at night.

The bees generate the warmth by "shivering" their indirect flight muscles in the thorax; this burns up a lot of energy, requiring carbohydrate from nectar / honey.

Larvae and pupae require a constant temperature of 35°C to develop correctly, with the bees using precise temperature gauges on their antennae.



## Top tips

Safety pins:

Close to the heart (and other sensitive parts of the anatomy) for many of us.....the zip bust. Often caused by an over vigorous tug in the wrong direction. A well placed safety pin across the bottom of the main zip of the beesuit or 2 around the backs of the hood zip can save the day.



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Keep safe everyone

Do ask for help if needed

And join us on the Westerham Training Apiary facebook site and follow the action:

<https://www.facebook.com/groups/688146028031698/>

Steve Riley 🚒

Education Officer

Westerham Beekeepers