

Happy New Year to Westerham Beekeepers and welcome to January 2018's BeeZeen.

This edition rambles on about :-

- > Why staring at varroa mites could be interesting 🤔
- > Queen marking colours
- > What's occurring in & around the hive in January?
- > Vaping oxalic acid 🤢
- > Top tip (and one absolutely rubbish one)

### Meet Veronica

So, here she is, on her back, legs akimbo and dead on the winter insert following vaping oxalic acid a few weeks back. Or perhaps fell through the open mesh floor from old age. Either way, you'd swipe left on Tinder 🤨. But if swiping right is your thing, you are probably undergoing an interesting transformation.....



Around this time of year, most varroa are phoretic (ie latched onto the bee rather than breeding in the cells), feeding on the bees' haemolymph or fat stores. For size comparisons, the equivalent for humans is walking around with a small dinner plate attached to you. Do give this a try at home 🤪

This year, a bunch of us will be going treatment free to manage varroa. Part of the process will be to monitor dead varroa under the microscope. Have they been bitten by bees? In the USA, they have a breed of honeybee called "Ankle-Biters" with very strong VSH (Varroa Sensitive Hygiene). This involves the bees aggressively grooming varroa off themselves and uncapping brood cells with varroa breeding in them. In our local bees, we have seen some of these behavioural traits of VSH already, which is encouraging. In fact, it's pretty damn exciting.

Now then, what happens if we can identify those local VSH colonies and breed Queens from them? Let's finish this section with a quote from Professor Tom Seeley at the National Honey Show this year: ***"Honeybees have the highest genetic recombination rate of any organism known."***

The other side of the equation is breeding varroa. Surely they want to evolve also as they have no future if they keep killing the bees. But what is stopping them? Could it be that wiping out 80-90% of mite populations with

insecticides is inhibiting a natural selection process? And, at the same time, encouraging the surviving mites to "breed for" resistance to insecticides (as we have seen before)

Going treatment free, breeding VSH Queens & colonies, flooding the local area with VSH genes..... 2018 is the start of a multi-year project back to more natural beekeeping.

### **Will You Raise Good Bees**

White, yellow, red, green, blue.

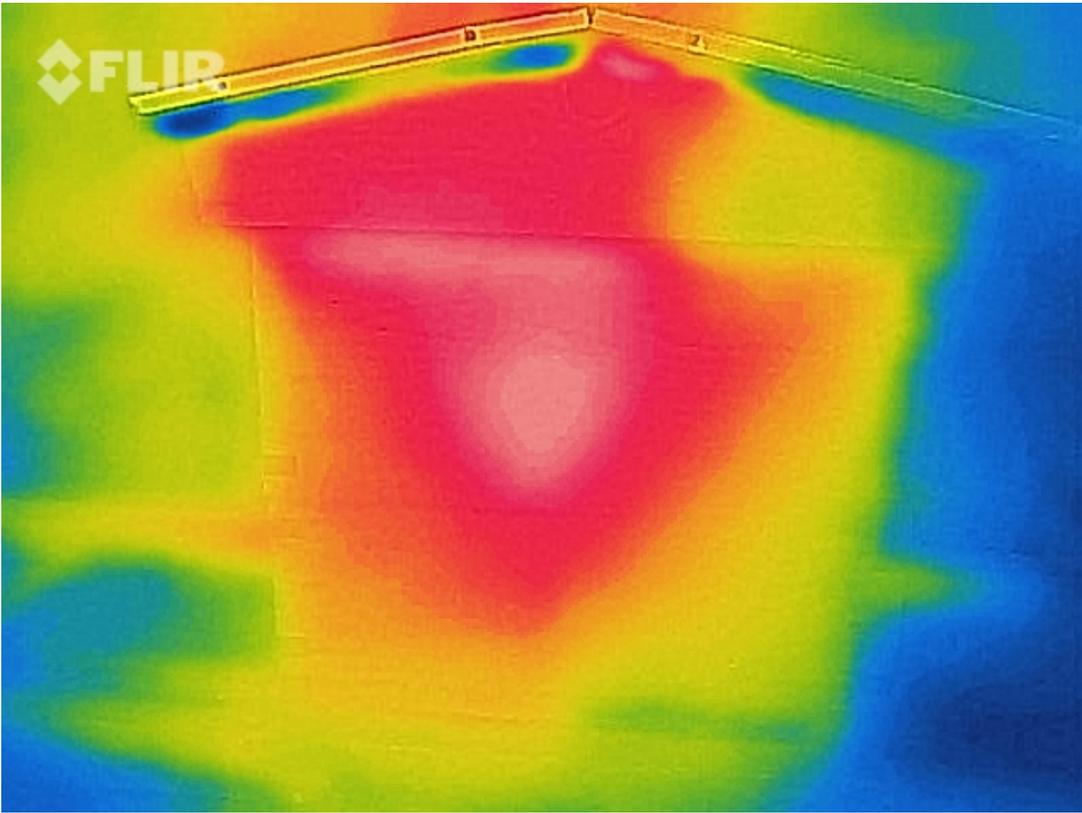


It's something that crosses borders without too much jaw jaw - the international code for marking Queens. Red is for 2018. More of this in a couple of months when you should be thinking about carefully marking Queens (or re-marking where the paint is wearing off) whilst colonies are small and you can find her.

### **What's going on inside / around the hive?**

> The cluster is getting smaller as older or diseased bees gradually die. Oxallic treatment will also kill some.

This colony shown in the infra red picture below (taken 23 Dec 17) is quite small. During the cold spells, the cluster is tight and there's little sign of them - including hardly any wax on the insert under the open mesh floor.



> What can you learn from the insert under your open mesh floor?  
It's a smorgasbord for anything surviving the winter, especially pollen mites.



You will see bits of wax where cells have been uncapped so that the bees can access their honey stores. This occurs during the warmer spells when the cluster breaks and picnic time ensues. Any crystallised bits are likely to be from ivy honey; get your nose in there to check its unforgettable aroma.

**But it was this that caught my eye** (*fessing up to a new gadget here*)



Can you see that in the middle? Egg!!!!!! There were about 12 of them on the correx insert. Why? In the summer, the usual suspects are the "Egg police" checking for unfertilised or abnormal eggs. It could be that. A quick check of the records shows this to be a strongly laying 2017 Queen.

So my guess is that this is something "man-made"..... One week earlier, they were vaped with oxalic acid. Interesting.

> During the warmer spells this month when the cluster temporarily breaks, expect to find dead bees outside the hive, as the undertakers get to work. This was taken at the Training Apiary a few weeks back.



> In January, the beekeeper's nerves are starting to shred, but a few encouraging signs are around the corner. The Queen will lay a small patch of brood this month, the size of your palm. Also, what's this poking up through the forest floor near the Training Apiary? Is Spring already in the air?



### Vaping with oxalic acid

Good session on Sunday 7th January at the Training Apiary. 12 interested souls in 4'C with a chilly wind. Thank you for a great turnout and a very warm welcome to newer members.

#### What to do:

Use Api-Bioxal (or Oxuvar) and record your chosen insecticide in the Veterinary Medicine Administration Record, which has to be kept for at least 5 years. The following link gives you more background blurb and access to the record card to keep you out of jail 🚔

<http://www.nationalbeeunit.com/downloadDocument.cfm?id=1059>

- 1) Tape over the entrance
- 2) Put 2 mg of oxallic acid powder in the vaporiser.
- 3) Insert vaporiser in the back of the hive through the open mesh floor and close up the wooden insert

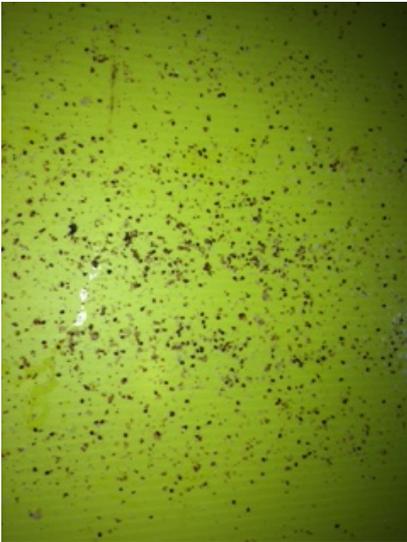


- 4) Attach the leads to a car battery for 2 1/2 minutes, then leave in for 10 minutes so that the fumes are captured in the hive. Retreat to a safe distance upwind of the fumes. Ughhh! And who is this bravely modelling next to the

hive? You have to be 'ard and from t'North to be that close.....



5) Check mite drop for the next week. The biggest drop will be in the first 48 hours.



And why are we vaping and talking about going treatment free? We will train on both. Treatment free starts from now on and is more likely to suit beekeepers with some training and experience under their belts.

### **Top tip**

Those on our Facebook site (<https://www.facebook.com/groups/688146028031698/?ref=ts&fref=ts>) will have seen this already. ....

Sometimes mouse guards get blocked with dead bees. Give the undertaker bees a little help by taking off the guard and scraping out dead bees off the floor.

This "Dead Bee Remover" is a bent BBQ skewer. It works best with a pipe cleaner around the metal end as it makes a grating noise across the metal open mesh floor, alerting the attention of ungrateful guard bees.



I hesitate with this second top tip from a 60 year old family member.....

3 flakes of fresh garlic in a teaspoon of honey first thing in the morning. He tells me:" It repeats a bit." Good luck to anyone trying it and do send in any non-abusive feedback 😊

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Don't forget, Tracy & Jacky run fabulous Taster Sessions where newbees get their first experience around a hive. Also, there's a tasty lunch thrown in 😊. All for £30. Do get in contact with them if you know of anyone.

Contact Tracy 07879 234 253 or Jacky [wbkatrainingapiary@gmail.com](mailto:wbkatrainingapiary@gmail.com)

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Education Officer 🧑

Westerham Beekeepers

Sent from my iPad