

## Westerham Beekeepers Association Newsletter – March 2021

### Introduction and update

Thank you to those of you who continue to support our online calls and talks. It is gratifying to receive your feedback, positive or constructive criticism alike. Our programme continues until April 28<sup>th</sup>, speaker details are below.

After our last talk on Wednesday February 24<sup>th</sup>, we had a brief online “fireside chat” about what people are seeing with their bees. The spell of warmer weather has provided relief for some – who have seen that their colonies have made it. For others, the news has not been so good. So, we discussed good practices for the early spring. Here is a summary:

1. Despite some mild, sunny days, it is not spring yet, really.
2. So, exercise some caution and maybe do not be tempted to open up too early. You will break the propolis seal and could “chill the brood”.
3. If you insist on opening, then try to leave it for sunny days of at least 16 degrees centigrade. Be quick, do what you must and then close up.
4. If you are feeding, then fondant is still preferable to any mix of syrup, as the bees will not process syrup when it is too cold.
5. If you have lost colonies, or they are not flying, they can wait. We already have cases of colonies that turn out not to be lost, they are just a bit slower to get going. The ones that then turn out to have died out can be dealt with later.

### Forthcoming events

Below is the calendar for forthcoming online winter talks:

#### 2021

- Mar 31<sup>st</sup> – Pam Hunter, Master Beekeeper on “Nutrition and the colony”.
- Apr 28<sup>th</sup> – Chris Park of Acorn Education on “Log hives”.

### January 27<sup>th</sup> – Derek Mitchell on “Hive ventilation, or why you shouldn’t”

Derek gave a very well-directed talk on hive ventilation and insulation, from the perspective of a researcher in physics with an interest in bees. Below are some notes from the talk, which we thought other members could find useful.

Single-walled national hives became attractive after the second world war, as they were cheaper, lighter for pollination services and their use was encouraged as part of the war effort as a substitute for sugar, where merchant ships were being sunk on route to the UK.

However, they are not well insulated. A natural cavity in a tree is about seven times more insulated than a normal “thin walled” hive – e.g., a standard wooden national.

It was previously widely believed that heat loss in a ventilated hive was low, but this has been shown to be down to research based on false premises. Nevertheless, the beliefs perpetuate that ventilation is necessary and beneficial, and that insulation is not necessary.

Recommendations:

- Use insulation on "thin walled" hives all year round.
  - In summer, it protects the hive from the hottest weather, to stop the inside of a hive heating up in the sun "like inside a shed in summer"), where bees are forced to forage for water to cool the hive.
  - In winter, valuable warmth generated by the bees stays in the hive and less wind and rain soaks into the wood and cools the hive.

Hives with good insulation:

- Warre hives (tall and thicker wood)
- Top bars (top bars form a seal above the bees)
- WBCs
- Poly hives
- Log hives

Open mesh floors radiate heat loss out of the bottom and allow turbulent drafts.

Colony nests are naturally damp and a high relative humidity aids open brood development. E.g., larvae require around 75% relative humidity.

A damp hive in winter is bad because it acts as a refrigerator through the evaporation. However, this is not a problem in a well-insulated hive as the environment will be damp and warm: a damp warm hive is far better than a dry, cold hive. Derek was keen to emphasise that our own ideas of what is an acceptable humidity level could be very different to those of the bees!

Anthropomorphism ...

Water generated by winter bees (metabolising honey and respiration) is warm water and reusable in the hive. Colony nests are naturally damp places. Dry hives (e.g., from use of a top entrance) force the winter bees to fly and gather water.

Ways of insulating national hives (members' photos):

Steve Whiteley's foil wrapped bubble wrap:



### February 24<sup>th</sup> – Dr Gerry Brierley on Apitherapy: a journey into the healing hive

For those of you who were not able to join Gerry's extensive dive into the many healing and medicinal properties of hive products, a transcript of the evening's meeting is available via WebEx on the following link:

[View meeting content](#)

Or:

<https://mr-dnh.my.webex.com/webappng/sites/mr-dnh.my/recording/26ed5b470a244626976b27d653f3b2ff/playback>

Mark Waddington

1<sup>st</sup> March 2021