

Late winter feeding

Lorenzo Pons

It was Sunday February 13th when my son Gabriel asked for an ice cream. I told him to take it from the freezer, but in his quest, he came across the pollen pot in the same drawer. He completely forgot about the ice cream and, while enjoying his little spoonful of pollen, he told me:

“Dad, when are we going to install the pollen trap? There’s hardly any pollen left in the pot...”

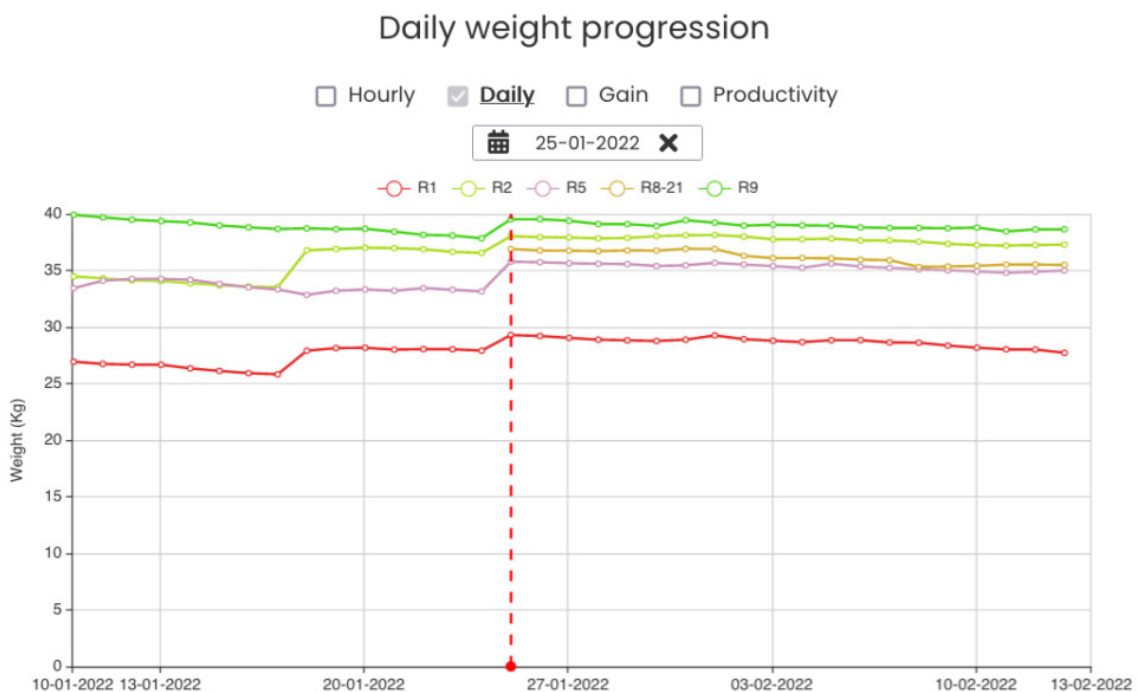
I told him that for the moment the bees were waking up and that we should not disturb them too much.

“They should first harvest for their own needs”

And Gabriel suggesting, “With your sensors, we will know when it’s the right time to put the trap in place?” I asked him to go for the iPad to check it.

We launched Mellisphaera and went to get the weight curves (in this apiary I have several W scales). Looking at the daily evolution I remembered that I had fed them with candi (for the first and only time this winter) on January 25th.

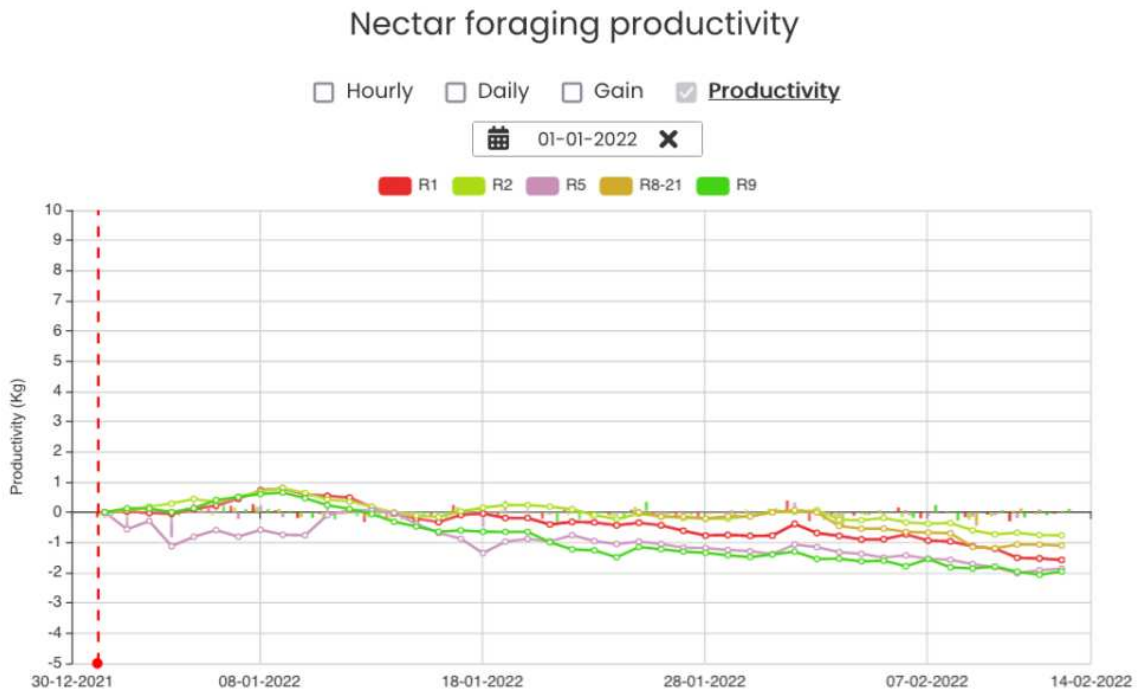
“Look at that Gabriel, we see that the weights, after feeding, still decrease slightly. They still consume their resources”



Weight raw of multiple hives

But to view it even better, you must go to the Productivity curves. This magnitude only considers the weight variations due to the bees and therefore ignores the feedings and other

stones, placed on the roof of the hives. The display is also more precise, with a more zoomed scale.



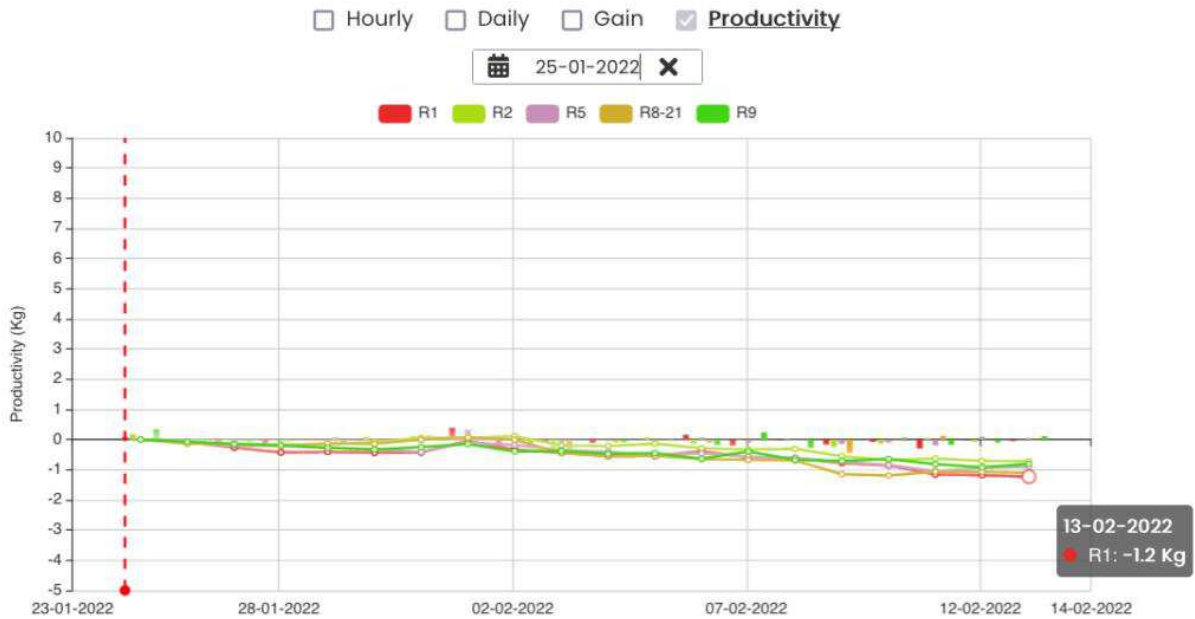
Hive productivity: consumption of resources during winter

“Here very clearly the consumption is -1 to -2 kg since January 1st and it keeps going down. They haven’t reversed the trend yet. We’re not ready to go put a pollen trap my son.”

Then the curiosity to see how fast they consumed the candi stung us.

“Let’s take January 25th, the date I fed them, as the reference date. They have consumed 1,2 kg for the greediest one “

Nectar foraging productivity



Hive productivity: consumption of resources during winter

“But all of them are sticking to the same trend,” Gabriel, who was following the reasoning closely, pointed out to me very pertinently.

“They must have already eaten half the candi bread”

“Do you want to go to the apiary and give it a check?”

Direct to the apiary for a feeding control visit

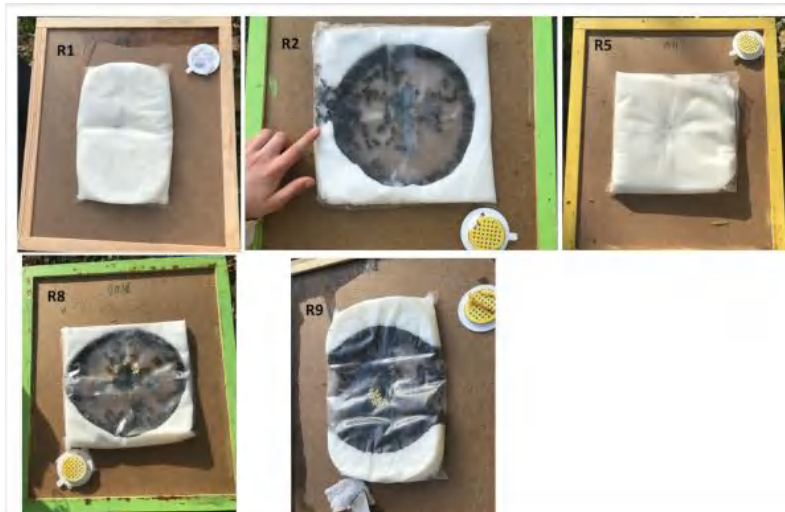
Motivation was at highest, so we went for the beekeeping suits.

This year I installed top covers with a feeding hole and candi packs on top, which allows a better insulation (less empty volume in the hive) and a better access for handling, even on cold days, without any discomfort for the bees.



What were we going to find? If they consumed 1kg each, the candi bread should be half already... I also used two brands of candi, Apifonda (2,5 kg) and AbeiFondant (2 kg). Would the bees prefer one or the other?

The findings were a bit surprising. Although their consumption was similar, some candi breads were widely consumed while others were much less. It seems that each colony decides where to take the resources from.



5 hives fed with candi: bees can draw perfect circles!

So this is what we spent part of Sunday afternoon. It was interesting to make the link between the virtual and the real. It was also instructive to better understand the dynamics of feeding. And just as much to notice that bees still continue to intrigue us with their behaviours.

Gabriel also impressed me on how he took the tools in hand super easily. He started performing almost-instinctive analysis on what was happening and what should be done. I am certainly a fulfilled dad 😊

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