

Acacia Honey and Mystery Weight Gains

As snow blankets much of the Midwest and northeast US, Chris, in Sonoma, California, reports that the bees from his two hives, Audrey and Bernice, have shifted from eucalyptus to *Acacia baileyana*. Chris has posted this YouTube video for our information and entertainment:

<http://youtu.be/CpnJxGYMDDs>

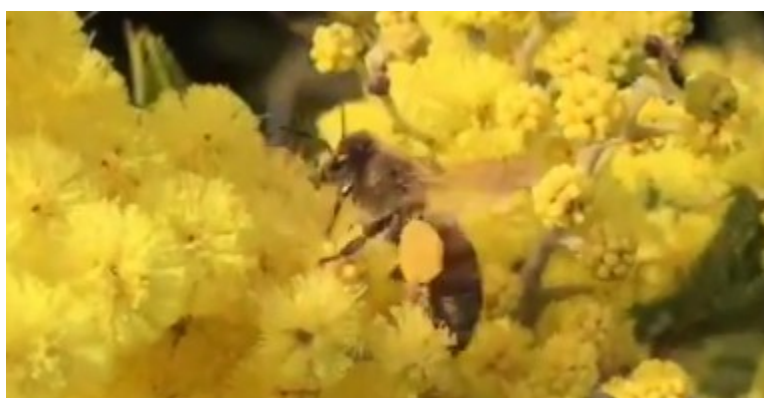
One beekeeper who saw Chris's video said that it couldn't be acacia because acacia honey is from locust and locust wasn't blooming now. Often, honey from the black locust is labeled "Acacia". The botanical name for black locust is *Robinia pseudoacacia*. It is also known as False Acacia.

One of Chris's hives, Audrey, gained 9 lbs for the week. See Graph 1. Rob's hive in Pella, Iowa gained about 20 lbs, 20 lbs of ice and snow! See Graph 2. Each white line is .01 to .04 inches of rain. A rain gauge at the hive helps explain the weight graphs.

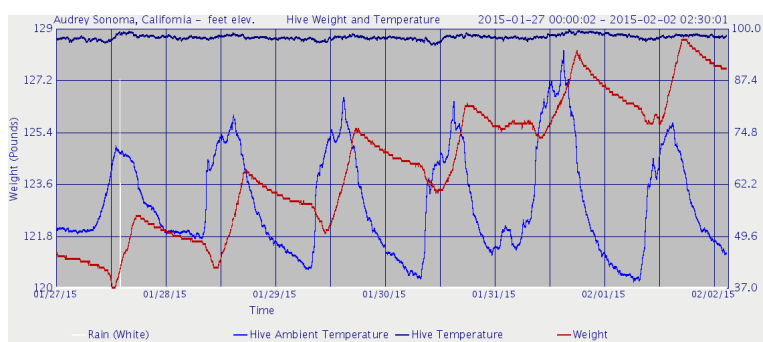
The mystery weight gain is circled in yellow in Graph 3. Hive temperature is blue and hive humidity is green.

On previous days, the weight starts dropping in the evening and steadily drops until the next morning, when the foragers leave. However, about 1 am in the morning on January 31st, the weight suddenly starts increasing. Note that at the same time, the evaporation loss stops for hive Audrey, shown in Graph 1, and it gains a little weight. The archived radar loop at Weather Underground doesn't show any rain in Sonoma on that day.

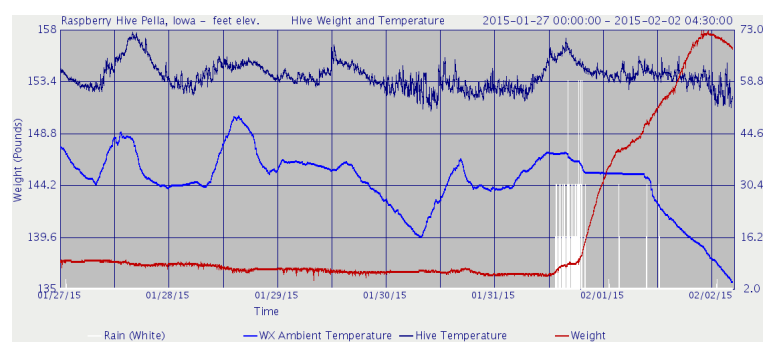
Is the gain water, bees bringing in dew? Or wax and wood absorbing moisture? Bees foraging by moonlight? Or something else?



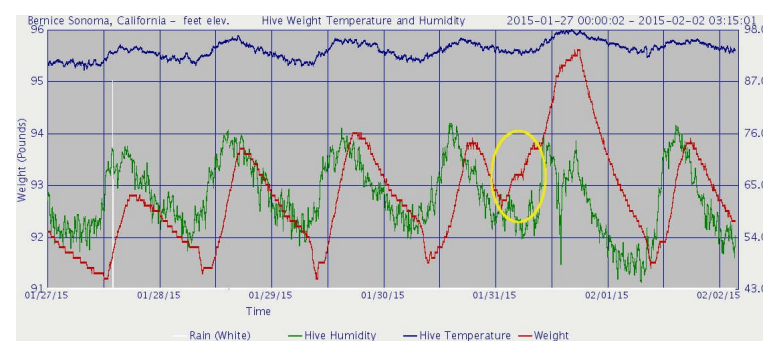
Picture 1: Gathering pollen from *Acacia baileyana*



Graph 1: Hive Audrey, Sonoma, CA, USA, gained 9 lbs.



Graph 2: Raspberry Hive, Pella, IA, USA gained 20 lb of snow.



Graph 3: Hive Bernice. Mystery weight gain is in yellow.



Picture 2: Sonoma, CA, USA Gathering pollen from Acacia baileyana



Picture 3: Raspberry Hive, Pella, IA, USA with 20 lbs of snow and ice.