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# LATE WINTER APIARY REPORT

March 2022

Mount Fair

## Overwintering analysis

We started fall with a good supply of naturally foraged honey in the hives, and on the last inspection, they still had enough honey left. All colonies have a wood shim to hold 5lb cakes of hardened sugar blocks as an emergency resource. Most of the bees were accessing the emergency feed even while they have ample honey resources left as they preserve what they have left in the long wait till the spring nectar flows. Many colonies



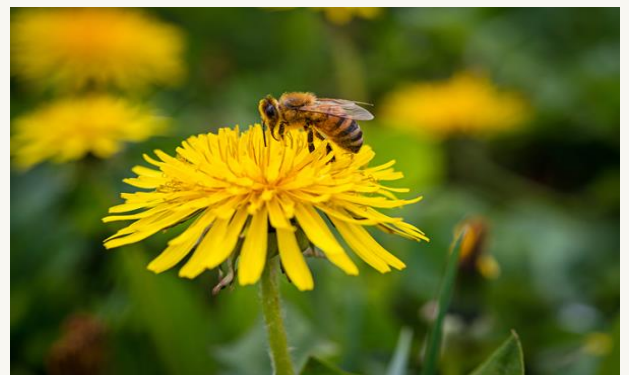
starve to death in early March, so the colonies are well provisioned. We did not administer any pollen supplements as your colonies collected an abundant supply last fall from the local environment and have all they need.

All eight colonies made it through the winter. The two colonies that were merged with other colonies last fall would likely not have made it through the winter. As we explore ways to

manage the apiary most efficiently, our goal for this next season is to have at least seven “production” colonies for harvest and two “resource” colonies for support. Resource colonies provide strength for other colonies, so all production colonies can enter the nectar flow in full strength. As hives falter, and some lines collapse, the resource colonies will assume the place and fill in for other colonies. Last year 45% of hives died in Virginia, so while we celebrate your apiary’s success, it may not be replicated every year, and I always recommend caution and consistent management to help keep the numbers as positive as they can be. Your hive count will increase in May and June and will likely contract again in September.

## On the Foraging Menu this month

Witch Hazels  
Willows  
Red Maple  
Dandelions  
Scotch Broom  
Hellebores



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## In the Hives

The population is increasing steadily and dramatically. The queen was laying a handful of eggs at the start of the year and is now up to ~500/day. That increase in population coincides with the dramatic mortality rate of the fall winter bees, who did all the hard work to get them to this point. Newborn bees are confined to household (inside) tasks for the first weeks but eventually graduate to outside tasks, the first outside task is to forage for resources. If you visit the hives in the late afternoon, you may observe a small spiral of bees, circling in front of their entrances. These are orientation flights, or the “swarm of the afternoon” these are the test flights of the first forager class, getting their bearings to supply the ever-expanding needs of the colony. You’ll be able to witness this for the next several months as the new graduates orient themselves to their hive entrance for their first flights.



## Pests

Your colonies have been treated with two rounds of oxalic acid vaporization/sublimation over the winter and are entering the spring season with low mite loads. This treatment is organic and well-tolerated by the bees. They are well positioned to handle most diseases and pests for the next three months. Our next hurdle will be making sure each hive is strong enough to withstand the pressure of the Small Hive Beetle, which can take down a new hive or a weak colony in less than a week.

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## 2021 Harvest Note

This past summer's harvest crystallized at a faster rate than normal. Crystallization is natural and normal; it only affects texture, and many people prefer it in this form as it is easier to spread. The rate that honey will crystallize is directly related to the type of nectar the bee's collected and its glucose content – the higher the glucose content, the faster the honey will crystallize. Clover tends to crystallize fast, and Cotton honey will form crystals while you are looking at it, it is all part of the natural product. If you would like to liquefy your containers, place them in a warm water bath (temps not to exceed 110 degrees) for as long as it takes, shaking the containers to help it along. You do not want to boil or microwave the container as it will destroy the enzymes and pollen that give your honey its best flavor. If you accidentally overheat the honey, it has a more caramelized flavor – excellent for sundaes, but it is not real honey anymore. We also recommend de-crystallizing just what you need – try to avoid the repetitive cycle of liquid/solid/liquid/solid in your jars.

## Beekeepers and your colony numbers

We are pleased that River will be returning as an apiary assistant this year during the very busy spring/early summer season. In addition, Environmental Biology teacher Dawn Tinder, with the Environmental Studies Academy (WAHS) will be training with me for her fourth year this spring. Tommy Garland has offered to assist with swarm management again this spring season.

Our management style is sustainable with organic practices. We employ intervention techniques to ensure hive survival and to maximize hive production. We do not try to keep every colony alive, we let nature's selective forces edit colonies as needed. It is relatively simple and affordable to start a new hive, so when a colony succumbs to certain pressures we start a new colony in its place, with donor stock from the strongest colonies in the apiary. Your apiary numbers will dwindle and expand every year, which is natural part of the beekeeping cycle.

Bee populations expand and collapse in a spectacular way and we try to find a balance that the local environment can readily support.

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I really appreciate working with your good stewardship; thank you for supporting the bees and the role Trophic can play in supporting them. I am really pleased to be a part of your apiary.

Warmest regards,  
Brooke Savage  
434-989-8351

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## Apiary Vocabulary



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**Small Hive Beetle** (*Aethina tumida*), an introduced pest from colonies in sub-Saharan Africa that became an established pest in the US in the early 2010's. It creates damage in hives by fecal deposits that ferment and create a “slime out” in a comb. The colony absconds and the comb is ruined.

**Honey Super**, a box with removeable frames placed for honey collection above the brood nest, part of the “superstructure”, surplus chambers for excess honey. This is one of the ways sustainable beekeepers can confirm that the colony always has enough of their own honey. Once the brood nest is full, anything in the superstructure is excess harvest for human use.

