



Project Update, December 2013: Ready for Winter

A Comparison of Strength and Survivability of Honey Bee Colonies with Conventional Versus Northern-Requeened Packages

by Erin MacGregor-Forbes, Master Beekeeper

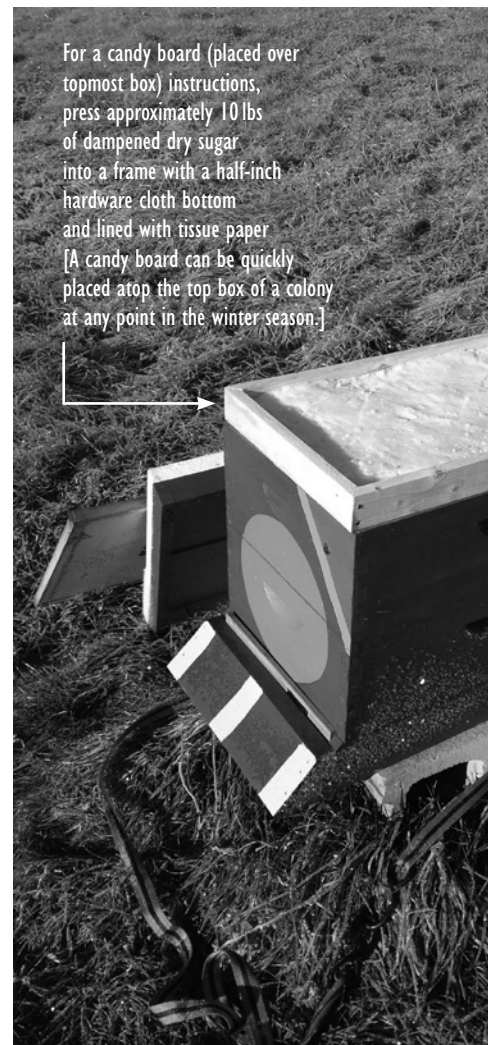
SARE FNE 12-756

The SARE colonies are ready for winter. In the October warm spell, we ensured that none of the colonies had empty honey frames above the clusters. If they did, we either removed that box entirely or re-arranged the frames in the boxes to place empty frames *below* the cluster and replace them at the top with frames filled with honey. In colonies that were light enough to risk starvation over the winter, we installed a candy board made by pressing approximately 10 lbs of dampened dry sugar into a frame with a half-inch hardware cloth bottom and lined with tissue paper. In all colonies, we also installed a homasote insulation board between the inner and outer covers to absorb moisture.

This is the first year in our SARE project that we have had to use candy boards for winter feed. In previous years, the colonies built-up and stored much more of their own food. This year we not only needed to feed almost all of the colonies for their entire summer season, but now we are using candy boards on nearly half of the colonies for winter feed. I attribute this to the following three factors:

- poor flow in Maine this season due to rain during the main June flow,
- less floral diversity at the Jefferson location than at the previous SARE sites,
- hive density vs. resources: 50 hives at one location where the flow is not consistently very good means that there inevitably will be periods when the colonies need feeding.

Fortunate for us, we had a good supply of sugar on hand and have been able to respond to the colonies' needs. As in previous years, we will not be wrapping any of the hives; I no longer use tarpaper wrapping on any of my colonies, including the SARE colonies. We achieve the solar gain that beekeepers seek from wrapping by instead painting all of the hive boxes a dark color. We are also using quarter-inch hardware cloth stapled over the bottom entrances for mouse guards. So now, with candy boards on those that need them, mouse guards and homasote insulation boards on all of the colonies, we are ready for winter.



For a candy board (placed over topmost box) instructions, press approximately 10 lbs of dampened dry sugar into a frame with a half-inch hardware cloth bottom and lined with tissue paper [A candy board can be quickly placed atop the top box of a colony at any point in the winter season.]



So now begins the next phase of the SARE project: the reporting phase. “SARE” is the acronym for Sustainable Agriculture Research and Education. I think of SARE farmer grants as citizen science projects. They are not as rigid or complex as a college-level grant project, but they are rooted in the study of a question which must be answered in a unique way. The root of our question is this: “Will requeening traditional commercial packages with northern-raised queens impact the strength or survivability of the colony?” Throughout the summer, we had two jobs for the project—Job 1: take care of the colonies without biasing them (we must treat all colonies in the same way, giving no particular advantage to any one colony); Job 2: record the progress of the colonies as we go

about the tasks of Job 1. Now at this point, our focus shifts to compiling and reporting the data that we collected this summer. We used the Beetight app to help do some of our data recording, but not all of our notes are logged into that software, as we found it somewhat cumbersome to use our smartphones in the bee yard. Pen and paper in a notebook worked best for us, so we reverted to using our Hive Assessment Tool sheets which we developed for the first SARE project. Now I will combine these data into one spreadsheet for ease of comparing the data that we have collected thus far. Because our project spans year end, we have an interim report due to SARE by the end of December detailing the work we have done so far, and how the project is progressing. We will still check the colonies a few

more times before the end of the project in early/mid-April, and the results of those final inspections will be the most important data for our final assessment of the project results. We will write our final report after the project has finished and then prepare our outreach presentations for sharing what we’ve learned.

SARE farmer grant applications are due in early December; application information, project guidelines and expectations, as well as reports from projects presently funded are available on the Northeast SARE website, nesare.org. It is not too early to be thinking about a 2014 application. 🍄



ABOVE: An insulating homasote board (with channel facing down, if present) gets sandwiched between the inner cover and the telescoping cover.



AT RIGHT: Note how a screened bottom board (SBB) insert can be a valuable evaluation tool in the cold months, as debris from the colony can indicate the location of the cluster, honey consumption (pale cappings), baby bee emergings (darker cappings), and obvious presence of varroa mites.

Bee Stories. . .

Unfortunately, we didn't have enough folks willing to tell their bee stories to have a gathering night. We did get several wonderful stories and I lament you won't get to hear these. The telling would have made them even more amusing, I'm sure. Thank you, thank you to those who responded!

As I've always said, anyone who keeps bees has a story—and a good one. So, even if you're too shy to stand up and tell these stories, I do strongly encourage you to write them, tell them to your friends and family, keep a collection. Your stories are important and just because we won't be gathering for an official telling night doesn't mean those tales are any less important.

Maybe we'll try again next year now that the idea has had time to settle and marinate in your minds. Watch for a story in your apiaries, in your swarm collections, in the smoke that drifts across your yard and settles in your memory.

May you find the words that catch the bees who provide the stories that teach us who we are. All the best to you and your bees in the coming year.

~ Cindy Bee