NORTHEAST SARE PROJECT NUMBER FNE12-756 [NESARE.ORG]

Project Update, April 2013: The End of the Planning Year

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

by Erin MacGregor-Forbes, Master Beekeeper

SARE 2013 (Sustainable Agriculture Research and Education)

The agricultural grant cycle often does not coincide perfectly with the natural cycle of agricultural projects. In the example of Northeast SARE, the grant applications are due in early December. This is actually a great time for grant writing, as it is just after the bees have been put "to bed" for winter. Late November and early December are a good time to reflect on the year, and put into words the concepts behind your grant application. New ideas developed over the bee season are still fresh in the mind, and the longer nights are conducive to reflecting and creating strategies to solve problems and study important issues. If the grants were to be awarded instantly upon application in December, it might allow adequate time to start and implement a project. However, applications are reviewed through January and February, and approvals are announced in March. For a bee project, there simply isn't adequate time to prepare for a project, order equipment and bees, or much of anything else between March and the time spring arrives. So in our project, specifically written into the timeline, we built a "planning year."

The planning year allowed us to spend an entire 12 months knowing that the project had been approved and gave us the opportunity to really get ready for the project to start. At the time of this writing, we have almost all of the equipment assembled, and the 100 8-inch cement blocks for our hive stands were delivered to the bee yard location yesterday morning. We are coming to the point in the project where things really look and feel like they are starting to happen. We now have a small building full of assembled equipment: 300 8-frame medium boxes with frames, plus 50 covers, bottom boards and inner covers. Not only that, but 50 colonies of bees are on the way! Just the equipment really takes up a lot of space, but it is a relief to see it all assembled and ready to go. Before we even began the process of building the equipment in January, it took three truckloads packed full in my Ford F-250 to transport it, and that was *un*assembled! Fortunately we have assembled it at the beeyard location, so transportation to the site is complete.

Preparing Frames

Cindy assembles a wedge-top/divided-bottom frame.

She cross-wires the frame, crimping the wire afterward (not depicted, but see the crimping tool just beyond her right hand).

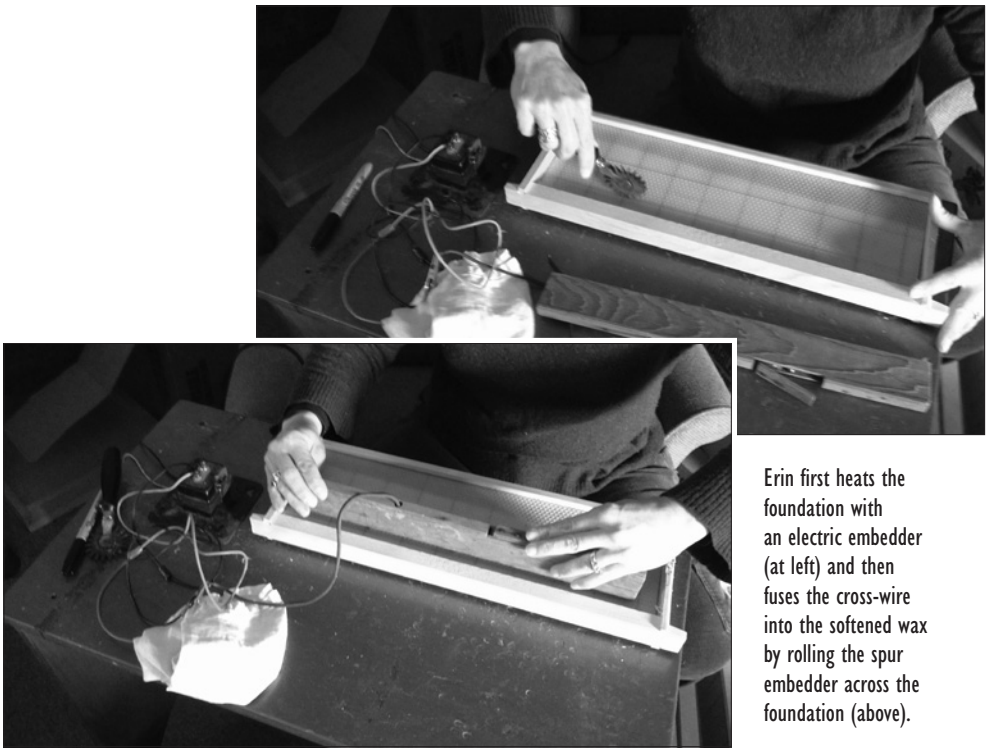
We have used wired wax foundation for the project, as in prior years. Cindy and I are both pretty fixed on wired wax, and particularly on cross-wiring frames "the old way"—or as Cindy would say, "the right way." Wiring foundation is time-consuming, but very well worth the effort. Although using foundation pins can work in a pinch, wired frames hold up much better over the long haul. Your bees will spend countless hours and untold efforts building the wax cells on your foundation which will become the structure of their super organism. Their nest could arguably be described as their crowning achievement, as drawn comb is worth more than gold or honey to a bee colony in search of housing—so giving them the strongest possible foundation for that structure is important. And the cross wires will support that comb much more securely than pins. Cross-wired super frames will hold up in an extractor, and cross-wired brood frames can absorb the jostling that moving hives creates, or even keep the combs secure in the frames if a hive tips in turbulent weather. The strong cross-wired frames will hold together as we stack and store extra equipment in winter, and the work of any lost colony will be preserved so it can be passed on to a new colony in a future year. In this way, we are building the strongest possible foundation for the 50 new colonies that will be arriving on May 11, 2013.

We have been doing the assembly and base-coat painting in the warm house, and storing the equipment in the unheated barn. Final painting—the decorative painting which will help the colonies orient to their own hive—has been waiting until we can actually stack the boxes and paint them outside. Looking at the 10-day forecast, it seems like we might get a decent stretch of weather this weekend that will allow me to start that final bit of the hive preparation.

This time next month, we will be mixing 1:1 sugar syrup in anticipation of the arrival of the packages on May 11. We will be hoping for good weather for installation day (as all beekeepers always do), and preparing everything we can to ensure the new colonies get off to a good start. The planning year is coming to a close and the real work is about to begin. We will keep you posted on the project!

Thank you to all of the supporters of our project, including the membership of the Maine State Beekeepers Association, York County Beekeepers Club, and Cumberland County Beekeepers Club, and the individuals and organization who have supported and sponsored colonies in our project. The sponsored colonies are allowing us to increase our sample size from 36 to 50 colonies, which increases the statistical significance of our results. We sincerely appreciate your support of our study, and we will keep you posted on the status of your colonies. We regularly post updates on our Facebook page—to follow us, "like" Overland Honey.

She inserts wax foundation into the frame, afterward nailing the wedge along the top of the foundation to keep it in place.



Erin first heats the foundation with an electric embedder (at left) and then fuses the cross-wire into the softened wax by rolling the spur embedder across the foundation (above).