

Making Fondant as emergency winter feed for bees



Above: Pat Rizenbergs uses a hand mixer to beat the hot fondant

At the LCBA meeting held on January 18, 2016, LCBA Veteran Beekeeper/Instructor Pat Rizenbergs gave an excellent talk on the making of sugar fondant which is used to feed to bees. The presentation was made this early in the year because of the importance in ensuring that our bees have sufficient food to get them through to spring.

Pat explained that during the winter, honey bees can die from starvation if they do not have sufficient honey stores within their hives. So it is important that at harvest time beekeepers should leave sufficient honey stores in the hives to get their bees through the winter. However, it is difficult to gauge how much honey the bees will use during the winter months, as this varies depending on temperatures and number of bees in the hive. Beekeepers cannot open the hives in cold weather to check on the amount of honey stores available, for fear of killing off the bees due to the cold air temperature. Pat explained that beekeepers can gauge the amount of honey stores available in a hive by lifting the back of the hive; if the hive feels noticeably light, it is necessary to provide food for the bees in the form of sugar fondant. If the beekeeper finds the hive difficult to lift then stores are probably sufficient.

Sugar fondant is a semi-solid mixture of sugar and water. Once prepared, the fondant is cut into suitable sized portions and laid on top of the hive's inner board. Due to the thickness of the fondant segments, it is necessary to add a spacer in between the inner board and the top cover. A spacer is a simple rectangle of wood about one inch deep, with the same exterior dimension as a hive box.

At the meeting, Pat gave us a hands-on demonstration of making sugar fondant. The recipe she uses is printed out below:

Recipe for Bee Candy / Fondant to be used as emergency winter feed for bees:

Ingredients: 4 pounds granulated sugar (9 cups), 1 and 1/2 cups water, 1/3 cup light corn syrup, 1/4 teaspoon cream of tartar.

Directions: Heat water in a heavy weight pan and slowly stir in sugar, mixing well. Stir in cream of tartar and corn syrup and heat to boiling point. Reduce heat and continue to cook until mixture reaches 240 degrees using a candy thermometer. Set the pan off heat to cool to 160 degrees.

This cooling will take 20 - 30 minutes. In the meantime, line a 10x15 cookie sheet or shallow pan with raised edges with wax or parchment paper so that the paper extends over the edges of the pan. Get the mixer ready and also a sturdy spatula or large metal spoon. Beat the mixture for a few minutes until it becomes cloudy and white. Quickly scrape the hot mixture into the pan to set up. **CAUTION:** The mixture will be very hot. If you beat too long, the mixture will become hardened (like a rock) and difficult to spread! Score the sheet of candy while it is warm into desired equal portions.



Above: Feeding fondant to bees in the name. A 2" deep spacer is placed on the hive between the inner cover and the outer cover. This allows space for the fondant and the bees between the inner and top covers