

Feeding Bees



When feeding bees, it is the sugar, not the water that the bees need. By mixing the sugar to water at different ratios, the beekeeper can encourage certain behaviors. Below are sugar syrup recipes from Keith Tignor, State Apiarist, and the actions they stimulate within the hive. Also included are candy recipes and instructions for dry sugar feeding used as emergency winter food when temperatures are below 50 degrees Fahrenheit.

SUGAR SYRUP RECIPES

1:2 One Part Sugar to Two Parts Water: Used in the spring to stimulate egg laying. Use only when enough honey is available for feeding the brood:

1 pound sugar to 1 quart water
or
5 pounds sugar to 5 quarts water

Stir sugar into warm water until dissolved.

1:1 One Part Sugar to One Part Water: Used in the spring and summer to encourage comb building:

1 pound sugar to 2 cups water
or
5 pounds sugar to 2½ quarts water

Bring water to a boil and turn off heat. Stir in sugar until dissolved and cool.

2:1 Two Parts Sugar to One Part Water: Used in the fall to increase food stores in preparation for winter:

1 pound sugar to 1 cup water
or
5 pounds sugar to 5 cups water

Bring water to a boil and stir in sugar. Continue stirring over heat until all crystals dissolve. Remove from heat and cool. Each gallon of syrup increases the colony's reserves by about 7 pounds

SUGAR CANDY RECIPES

Recipe and great [video](#) on Making Sugar Candy for Winter Feeding by Pete Ostrowski of the Colonial Beekeepers Association:

Utensils Needed:

Heavy sauce pan with lid
Extra Pot
Siring Spoon
Candy thermometer
Electric mixer
Disposable molds (foil lined paper plates work well)

Ingredients:

4 lb bag of sugar
8 cups sugar (4# bag)
2 cups water

OR

5 lb bag of sugar
10 cups sugar (5# bag)
2-1/2 cups water
(Doubled recipe works for either 4# or 5# bags making about 6 each 9" plates 1/2" deep)

Procedure:

1. Pour all ingredients into sauce pan and bring to boil stirring constantly
2. Cover and boil 5 minutes
3. Insert candy thermometer and boil until temperature reaches 234°
4. Remove from heat and cool to 200° (putting pot into sink full of water will speed this up!)
5. Whip with electric mixer until mixture begins to turn white with air bubbles throughout (3-4 minutes on the timer)
6. Pour into molds and allow to cool undisturbed
7. Store in a dry location (freezer is a good place)

MICROWAVE SUGAR CANDY

Spray mold with cooking spray
Stir 1/4 cup water into 3 cups sugar
Microwave at full power for 2 minutes
Take out and stir
Microwave another 4 minutes
Pour into mold and let harden
Unmold and place candy on the top bars of the hive

NO-COOK SUGAR CANDY

10 pounds granulated sugar
1 cup water

Stir water into sugar thoroughly. Form moistened sugar into slab on plastic wrap and allow to dry, at least overnight. Remove plastic wrap and place candy directly on top of frames over winter cluster of bees using a feeding rim, shim or additional super around candy.

SUGAR CANDY

15 pounds sugar
3 pounds white corn syrup
4 cups water

Dissolve the sugar in the water by stirring and boiling the mixture until the temperature of the syrup rises to 242°F. You must use a candy thermometer while bringing the syrup to 242°F. Let the syrup cool to 180° F, then beat until thick. Pour the candy into molds lined with wax paper. Place a cake of sugar on two small, 1/2 inch square strips of wood in an empty super above the cluster of bees. Cover the candy and the space around it with cloth or newspaper to keep it warm. Remove any remaining candy and feed syrup when the weather gets warm in March or April.

Another substitute for making fondant is to purchase baker's fondant from a bakery or a grocery store that bakes and sells iced cakes. The white sugar icing that is used on commercially baked cakes is the nearly the same thing as fondant and can be used in the same way. Bakers purchase this white icing in buckets, and you may be able to persuade a local baker or grocer's deli to sell you a bucket. But make sure it's white - not flavored.

DRY SUGAR FEEDING (MOUNTAIN CAMP METHOD)

2" Feeding rim or empty super
Sheets of black & white newspaper
Bag of white sugar
Spray bottle of water or sugar syrup

Place the feeding rim or empty super directly over the brood frames.

Mist one or two sheets of black & white newspaper with water or sugar syrup.

Place the moistened newspaper over the frames, covering approximately 2/3 of the area and leaving about 1/3 of the top of the frames uncovered. Make sure that the newspaper is inside the feeding rim or super and does not extend outside the hive where it could wick moisture into the colony.

Dump the bag of sugar over the newspaper, mixing as you go to clump it and keep it from running off of the paper. Give it a final mixing to form a crust.

Place the inner cover over the feeding rim or super and place the telescoping cover back on the hive.