

Winter Hive Preparation

Applications of treatments.

Equipment needed and any construction.

Schedule and reasons for application.

Importance of Post Winter Feeding and Winter Feeding

Why do we feed our bees?

We from time to time need to help nature out, when there is no nectar or pollen available.

We may need to achieve a particular occurrence within the colony.

The colony will need treatments to control pests or disease or prevent a disease.

Feeding for Medication Application

We are confronted with winter and closed hive diseases which can be treated using a feeding process.

Fumagilin-B is used for Nosema Ceranae and can be introduced in sugar water in the Fall and Spring. If you jar feed you must shield the jar from sunlight.

Honey-B-Healthy, Hive-Alive and other products such as Apple Cider Vinegar mixed with Api-Care to mixed into the syrup you feed. There are several other products available.

Caution: when using these products feed every hive the same mixture to avoid robbing.

Dry Feed Verses Wet Feed in Cool or Cold Seasons

Dry sugar, fondant or sugar boards can be applied for emergency feeding. This would take the place of a less safe syrup or wet feed.

Dry pollen yard feed or in a special hive top feeder works well.

Pollen patties applied into the hive between the hive body and the winter super is helpful. This also can encourage early spring build up.

Seasonal Feeding

Pre-Winter and Mid-Winter Feeding should be done in most cases when the air temp is above 55 degrees for a week. But beware of cold snaps.

Most pre-winter feeding is done with 2:1 sugar syrup but Wet feed can be a hazard if applied in cold weather bringing moisture into the hive chilling the bees.

Never over feed.

Types of Feeding

Feeding sugar water

Applying sugar boards

Inserting fondant

Applying pollen patties

Put out dry pollen substitute

For the application of certain medications

**Open Yard Feeding (for larger yards)
only in the case of emergency post
low temperatures.**

Supplements

Pollen Substitute



Pollen Patties



Dry Pollen

Fondant

**Honey B
Healthy**

Products applications available

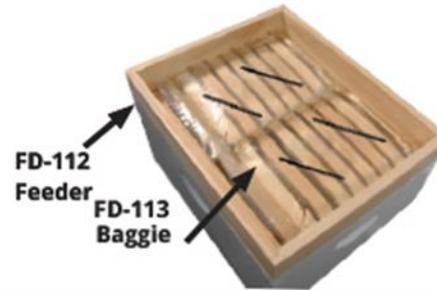
Entrance Feeder



Miller top feeder



Baggie Feeder



Dry Pollen/Syrup



Bucket Feeder



Internal Feeder



Inverted Feeder (jar)



Dry sugar

Pollen Substitute in bulk feeding.



Dry pollen substitute can be put out now and consumed all winter as long as the bees can forage. Weather can be the only drawback.

This picture is for a yard with 22 hives. They do make a hive top feeder for dry pollen but condensation may cause the dry powder to harden. An insulation pad on top may help.

Pollen Pattie applied mid-winter



Patties can be applied if you do not have a Small Hive beetle infestation. If the weather is cold at night and not warmer than 60 degrees during the day they can be applied. This can wait until after Christmas.

The pattie can be a breeding ground for beetles.

Fondant



Fondant should be applied later and only if your hive is very low on feed or to prevent starvation. It can be applied to the top of the winter feeder with a 3 inch shim. You will need to press the fondant out to about 2 inches thick using powdered sugar to keep it from sticking to your rolling pin.

Baggie Feeding



Fill a high quality 1 gallon freezer bag $\frac{3}{4}$ full about 3 quarts with 2 to 1 syrup mixture. Apply a 3 inch spacer on the top of the winter super.

Cut 3 slices in the front of the baggie about 3 or 4 inches long. The surface tension will keep the fluid from running out.

Here's How To Make Grease Patties

One batch will treat 8-10 hives. You can easily increase or decrease the recipe size depending on your needs.

Ingredients:

4.4 pounds (2 kg) granulated sugar

3 ounces (90 ml) corn oil

1.5 pounds (0.7 kg) vegetable shortening (Crisco)

1 pound (454 g) honey

1/2 pound (227 g) mineral salt (pink color)

2.2 ounces (65 ml) wintergreen oil (or tea tree oil)

How To Put It All Together:

Step 1: Mash up the salt so that it mixes evenly throughout the patty. This also prevents water droplets from forming around salt crystals.

Step 2: Mix all the ingredients really well using protective gloves.

Step 3: Make patties the size of small hamburgers.

Step 4: Store in freezer until ready to use.

You want to put about 2 patties on top of the frames per hive.

Shim for Baggies, Patties (Pollen and Grease), Dry Sugar.

A shim about 3 to 3 1/2 inches wide may be applied to the top of the winter super you can use it for emergency feeding.

You can put down newspaper with holes punched into it for access and pour dry pollen, dry sugar on top.

You can apply a baggie of syrup but the pollen patty should go between the brood chamber and winter super. I should be press out to 1/4 inch to 3/8 inch thick using a rolling pin and wax paper.

Bee Candy Recipe

- 15-16 lb. of sugar*
- 3 cups water
- 1 tbsp. plain white vinegar (optional)
- 1 tsp. Honey Bee Healthy (optional)
- 1 Pollen patty or winter protein patty(optional)
- Screen wire ½ inch or #5 hardware cloth. Something the bees can move easily through.

Make a the 2 inch tall candy board frame from scraps of wood you may have lying around. Staple 1/2 inch wire mesh to the inside for a candy support and drilled a 1/2" hole in the front for the bees to escape and vent.





1. Weigh out 16 pounds of sugar and put it into in a very large canning pot.
2. Add vinegar to water and poured the water mixture in a little at a time, stopping to make sure it was all mixed into the sugar.
3. To mix it properly it takes some muscle but it is easier and faster than cooking sugar candy on the stove.
4. Line the wire mesh with paper that came with some beeswax foundation or wax paper with holes punched into for access.



5. place a pollen patty inside the center of the candy. The idea is that it will take several weeks for the bees to eat enough sugar to reach the pollen patty. The sugar below the pollen will hopefully last them until the month of February when they will be running low on their own pollen. The cold weather should act as a natural refrigerator keeping the pollen fresh for them.

6. After the patty was securely in place, I covered it with the rest of the sugar and leveled it off using a wooden ruler/paint stick. I can take 24 hours or more for the candy to dry completely.



The block used to provide a vent hole for excess moisture to escape. You can use Honey Bee Healthy in the sugar board mixture instead of White Vinegar. Also you can leave out the Pollen Patty if you so desire.

The board should not be applied too soon but before the temperatures drop too much to open a hive safely.

If you have a choice of starvation or chilling your bees they will overcome a chill. You have to do something or lose your bees.

It is important to feed your bee up prior to extreme cold weather. Now is the time to feed what you can while the weather is still above 65 degrees.

If we can feed them in the spring when it is above 55 the we can feed them now.

If your hives are heavy but not honey bound they can make it through the winter. The Winter super should be full know the nature of bees to move up. The bees will follow the heat and move out of the brood box up nearer to the super.

An insulating pad on top of the hive cover will help with condensation.

Strong healthy hives can endure many hardships. We sometimes have to intervene and give them a little help. This is Bee Management.

Thank you for your attention.

You can send any questions later to our Bee Mail address.

iredellbees@hotmail.com our website is for now is **www.iredellcountybeekeepers.org** this site may be changing.